



The CHEMIST AND DRUGGIST

for RETAILER - WHOLESALER - MANUFACTURER

Established 1859

28 Essex Street, Strand, London, W.C.2.

Registered as a Newspaper

O. 3471
OL. CXLVI

AUGUST 17, 1946

Annual Subscription (with
Diary) 25/- Single copies 9d.

SCIENCE &
PHARMACY SERIES No. 45.



Sir William Crookes

1832

1919

This typical English Chemist and Physicist was born and bred in London where he died after a long life devoted to science and humanity. His many contributions to practical science include the discovery of Thallium and the invention of the Radiometer, used to measure the intensity of radiant energy. The well-known Crookes glass, one of his many gestures of public welfare, was invented to protect the eyes of molten-glass workers from the effects of deleterious rays.

BURGOYNE BURBIDGES

Established 1741 & COMPANY LIMITED LONDON E.6



Sulphamerazine Tablets, P., D. & Co

*An Effective Sulphonamide
with a Low Dosage . . .*

SULPHAMERAZINE (P., D. & Co.) is a monomethyl derivative of sulphadiazine. Its chemical designation is 2-sulphanilamido-4-methyl pyrimidine.

It is stated to be absorbed more rapidly and to a greater extent from the gastro-intestinal tract, and to be excreted more slowly, than its analogue, sulphadiazine. As a result, effective concentrations in the blood-stream and body tissues can be maintained with fewer oral doses than are required with sulphadiazine or other sulphonamides.

Sulphamerazine Tablets 0.5 gm. (P., D. & Co.) are supplied in bottles of 100 and 1000.



Parke, Davis & Co., 50, Beak St., London, W.I.

Laboratories : Hounslow, Middlesex.

Inc. U.S.A., Liability, Ltd.

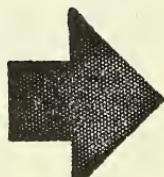


Your customers look to you for sound advice. Many people still don't know the astonishing virtues of MILTON in soothing and healing burns. Why not tell them about MILTON!

SevenSeaS

COD LIVER OIL

Presents to the chemist the best opportunity for increasing turnover and profits. The public have never before been so fully aware of their need for more fats and more vitamins and SEVENSEAS is the best answer for both.

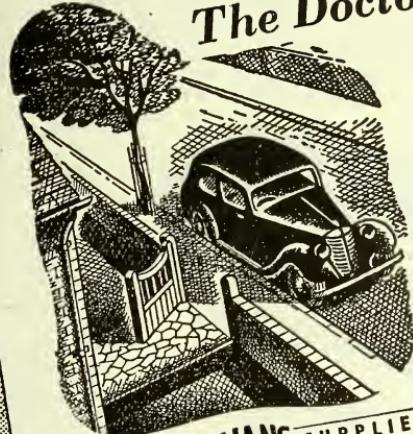


It is to the chemist's advantage to render National Service by pushing sales

ISSUED BY BRITISH COD LIVER OILS (HULL & GRIMSBY) LTD.
ST. ANDREW'S DOCK, HULL.

This advertisement and others

The Doctor is at No. 23 . . .



MEDICAL EVANS SUPPLIES

Your doctor trusts them

EVANS MEDICAL SUPPLIES LTD. LIVERPOOL AND LONDON

AT TIMES OF SICKNESS, the doctor's knock at the door is the world's most comforting sound. But the doctor at the bedside is only *part* of the army which fights disease. Behind him, supporting him, is the research scientist in the laboratory. For in the laboratory are forged the *weapons* of healing—medicines, drugs, sera, vaccines—upon which both doctor and pharmacist rely.

In the vital field of research and discovery, the name of Evans holds a distinguished place. Behind the perfection of Evans products—biological, pharmaceutical, chemical—lies nearly 140 years of experience.

During the coming months many potential customers are going to see this new EVANS advertising which will appear in the leading National and Provincial papers and Weekly Magazines. Emphasising fully the importance of the part the Evans Organisation, jointly with the Doctor and Pharmacist, plays in maintaining the nation's health, this advertising is certain to encourage a wider acceptance of all products bearing the Evans name.

will help to sell more

MEDICAL *EVANS* SUPPLIES

EVANS MEDICAL SUPPLIES LTD., LIVERPOOL & LONDON

Makers of fine medical products for 140 years

Introducing RENDELL GELS



Supplies are immediately obtainable from your usual wholesaler at the following P.A.T.A. rates.
 Quantities up to 6 dozen tubes at 21/- per dozen net.
 Not less than 6 dozen tubes at 20/- per dozen net.
 Not less than 12 dozen tubes at 19/- per dozen net.
 Standard pack in sealed glass tubes containing 12 Gels.
 Retail price 2/6 per tube.
 (Exempt from Purchase Tax)

The purpose of introducing RENDELL GELS is not to supersede our world-famous product, but to provide an alternative of equal merit embodying the same active principles, for those who prefer this type of contraceptive. The success of our efforts has been confirmed by clinical and independent laboratory research, and the chemist may offer this new product, when called upon to do so, with absolute confidence.

RENDELL GELS do not contain poisonous or irritating substances and may, therefore, be sold without restriction.

SOLE MANUFACTURERS:

W. J. RENDELL, LTD., 161, ROSEBURY AVENUE, LONDON, E.C.1.

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The "MODERN" TEAT

ANTI-COLIC. RECOMMENDED BY HOSPITALS, DOCTORS AND NURSES

- Ball Top, one-hole perforation, ensuring constant and steady flow.
- Buffer shoulder protects baby's mouth.
- Tab enables teat to be slipped over bottle in an instant with minimum handling.
- Collar ensures firm grip on bottle which CANNOT BE PULLED OFF BY BABY
- Will stand Repeated STERILISATION.



MODERN in design and must be TRIED to be appreciated.

NEAREST TO NATURAL FEEDING

The "MODERN" Teat has been specifically designed to meet the needs of both MOTHER and BABY, and what is of vital importance in these days—it LASTS LONGER. It is hygienic, odourless and tasteless

Fixed Retail Selling Price 6d. each Obtainable of all Wholesalers

WHOLESALE ONLY FROM:—

THE CANNON RUBBER MANUFACTURERS LTD., LONDON, N.17

PATA

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Fig. 58

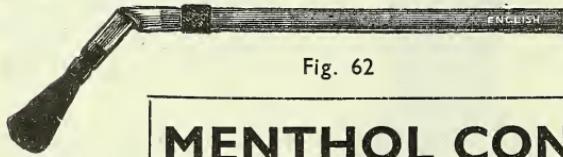


Fig. 62

IODINE & THROAT BRUSHES

in all qualities—
showcards now available

MENTHOL CONES

The '45' DOME. 2 Sizes, 9/3 and 10/- dozen.
(Fig. 374)

The 'VICTORY' tall Plastic Case. 3 Sizes, 8/3, 8/9, 10/- dozen.

The 'FINGER TIP' (Reg'd). 9/6 dozen.

All mounted in plastic cases and
packed in show boxes of one dozen.

Liberal discounts for Export.

Made and Stocked by—**M. J. FECHER, LTD.**
121 High Street, SLOUGH, BUCKS.

Phone: SLOUGH 21864

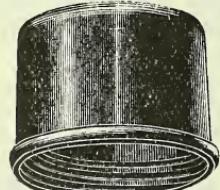
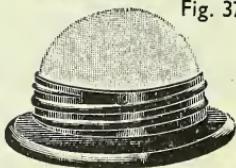


Fig. 374



ANNOUNCEMENT

by

J. C. ENO LTD.

and

VENO DRUG CO., LTD.

J. C. Eno, Limited, having now overcome the difficulties of re-establishment, following the destruction by Enemy Action of their factory at New Cross in 1940, are recommencing operations from new premises in Watford, Herts., as from 1st October, 1946.

As from this date—1st October, 1946—J. C. Eno, Limited, will be able to relieve its Associated Company, Veno Drug Company, Limited, of the distribution which that Company has undertaken for the past few years.

In addition J. C. Eno Ltd. are taking over the selling agency for Dinneford & Co. Ltd., previously handled by Macleans Ltd.

The lines which J. C. Eno, Limited, will distribute are :—

ENO'S "FRUIT SALT" and CALEND

DINNEFORD'S FLUID MAGNESIA

DINNEFORD'S MAGNESIA TABLETS

THERMOGENE MEDICATED WADDING

THERMOGENE VAPOUR RUB

NEW-SKIN ANTISEPTIC WATERPROOF COATING

— • • • —

Orders for these products, as from 1st October, 1946, should be sent to :—

J. C. ENO LIMITED • WATFORD • HERTS

A Truly Great Name

held in Respect and Trust by
Pharmacists the world over.

The 'COX' organisation offers the benefit of long experience plus up-to-date manufacturing facilities.



PILLS · TABLETS PACKED SPECIALITIES

FOUNDED 1839

FOUNDED 1839

ARTHUR H. COX & CO LTD.

MANUFACTURING CHEMISTS

BRIGHTON

NATION-WIDE ADVERTISING

Appearing NOW

- NATIONAL DAILIES
- PROVINCIAL DAILIES
- PROVINCIAL WEEKLIES
- POPULAR MONTHLIES
- WOMEN'S JOURNALS
- RELIGIOUS PUBLICATIONS
- FILMS
- SLIDES
- POSTERS
- BUSES
- TRAMS, ETC.

Here's a certainty of big PROFITS. You stock VALPEDA. We move it for you.

VALPEDA, retail 2/- (tax included) is a product of DAE HEALTH LABORATORIES and does everything that is claimed for it. All common FOOT TROUBLES are speedily benefited. Its merit alone builds repeat business.

Now comes the biggest campaign ever launched for a FOOT preparation. The list of papers would alone fill several pages of this journal.

Over and above this, practically every other kind of advertising will be used. We are doing our part to put PROFITS your way (VALPEDA shows a handsome margin). Display VALPEDA. Link up with this great campaign and increase your profits.

Valpeda

ANTISEPTIC FOOT BALM

DAE HEALTH LABORATORIES LTD., 17 BERNERS ST., LONDON, W.1



GLANOID

MEDICINAL PRODUCTS OF ANIMAL ORIGIN

Chemist Counter Lines

ARMOUR'S JUNKET PRODUCTS
(TABLETS, POWDER, ESSENCE)
GLANOID CALF'S FOOT JELLY
GLANOID BEEF EXTRACT
GLYCERINATED

A FULL RANGE OF GLANDULAR
PRODUCTS PREPARED FROM FRESH
WARM GLANDS SUPPLIED IN
AMPOULES, TABLETS, LIQUIDS
AND CAPSULES
available in Package Form
or Bulk Containers

Also PEPSIN all strengths

PEPTONE

both Bacteriological
and Commercial

ADRENALIN B.P. 1932
(Pure)

PANCREATIN U-S-P

Inspissated
OX GALL Powdered
Purified

BILE SALTS POWDER

Send your enquiries to :

THE
Armour Laboratories
ARMOUR AND COMPANY LTD.

27-28 FINSBURY SQUARE, LONDON, E.C.2.

Phone
Monarch 8044

Grams

"Armosata-Phone," London

URGENT
EMPTY
CASES
please

For some time past we have experienced considerable difficulty in despatching supplies of Andrews because of the acute shortage of cases.

The position is NOW SERIOUS

and unless customers holding Andrews empty cases return them immediately a hold-up in deliveries will result. Your co-operation is requested. Postage or carriage will be credited.

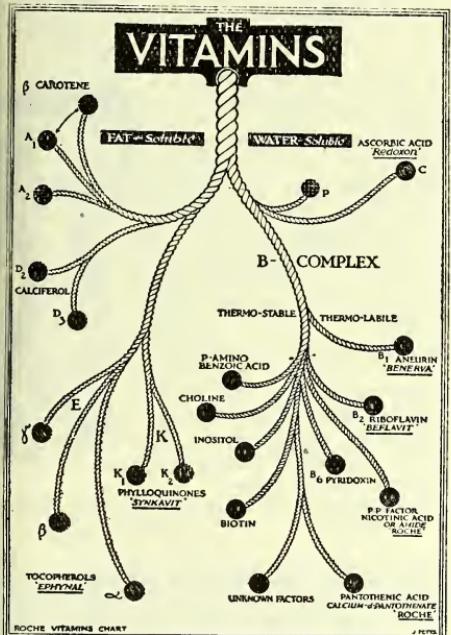
HOW TO SEND

Fold cases flat, flaps inside, tie up. Ready addressed, gummed labels obtainable from our travellers, or direct from us. Up to 15 lbs., by post (state cost on label). Over 15 lbs., by rail, c/fwd (or state cost on label).

ANDREWS

SCOTT & TURNER, LTD.
Andrews House, Newcastle-upon-Tyne, 2

'Roche' Vitamin Preparations



B 'BENERVA' Vitamin B₁ (aneurine or thiamine). Used in neuritic conditions, beri-beri and during pregnancy and lactation etc. Tablets of 1 and 3 mg., Ampoules of 5, 25 and 100 mg.

B₁ 'BENERVA' COMPOUND
B₂ P P Contains in one Tablet the three best known and most active constituents of the vitamin B complex — aneurine

(1 mg.), riboflavin (1 mg.), nicotinic acid amide (15 mg.).
 Tablets in Bottles of 25, 100 and 500.

B 'BEFLAVIT' Vitamin B₂ (riboflavine or lactoflavin). Used in dermatology (seborrhoeic, dermatitis, rosacea, etc.), ophthalmology, etc.
 Tablets of 1 & 3 mg., Ampoules of 10 mg.

C 'REDOXON' Vitamin C (*l*-ascorbic acid). The first synthetic vitamin. For scurvy and other conditions due to vitamin C deficiency, e.g., defects of nutrition in children, during pregnancy and lactation, convalescence, etc.
 Tablets of 5, 25 and 50 mg., Ampoules of 100 and 500 mg.

E 'EPHYNAL' Vitamin E (*alpha*-tocopheryl acetate). Used in cases of habitual abortion, menopausal disorders, etc., in certain muscular dystrophies. Given prophylactically during pregnancy. Tablets of 3 and 20 mg.

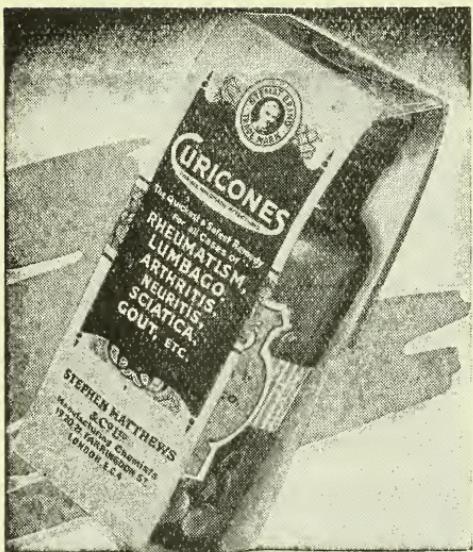
K 'SYNKAVIT' Vitamin K (vitamin K analogue). Water-soluble. Suitable for intravenous as well as for intramuscular injections.
 Tablets of 10 mg., Ampoules of 10 mg.

ROCHE PRODUCTS LIMITED

WELWYN GARDEN CITY, HERTS



Scottish Depot: 665, Great Western Road, Glasgow, W.2



CUSTOMERS WANT THE LARGE 24'- SIZE *You can order it!*

We are pleased to draw attention to the fact that

5/- and 24/- Bottles of

CURICONES

are always available through all leading wholesalers

We draw special attention to this because, in recent weeks, many instances have come to light of intending purchasers being informed that these sizes are unobtainable

ORDER THROUGH YOUR USUAL WHOLESALER

CURICONES

For the relief of Rheumatism and kindred troubles

STEPHEN MATTHEWS & CO., LTD.
19-21 FARRINGDON ST., LONDON, E.C.4

TIME to do the important thing.

- ★ TO TAKE STOCK
- ★ TO FILL PRESCRIPTIONS
- ★ TO CLEAN SHOP

A forty-eight hour day would solve much. It might simplify staff shortages, quotas and restrictions that give no time for planning ahead.

In your increased leisure you could learn how mineral deficiency, affecting the great majority of your customers, is being combated by CALFOS, which supplies the vital minerals, calcium and phosphorus, in their most assimilable form, with *all* the minute trace elements found in normal healthy bone.



*Medical Acceptance that
Brings you SALES*

When you recommend CALFOS to your customers, you are giving them a product which many doctors prescribe. Every expectant and nursing mother, every child, and adults of all ages will be grateful for your advice.

CALFOS
Natural Mineral TABLETS

TRADE TERMS

Boxes of 50's:

Per doz. 20/- plus Purchase Tax 3/4
Retail Price 2/9½d. including P.T.

Boxes of 120's:

Per doz. 38/- plus Purchase Tax 6/4
Retail price 5/3½d. including P.T.
P.A.T.A.

These Vital Minerals Build Bone
& Teeth and Preserve Good Health

CALFOS LTD.

IMPERIAL HOUSE . KINGSWAY . LONDON . W.C.2



An Apple A Day

... keeps the doctor away — perhaps. As we don't sell apples we are unable to say, but we do make hundreds of products for the dispensing chemist which we believe are better than apples for guarding the health of his customers.

MANUFACTURING CHEMISTS
OFFICE & WORKS: MANSFIELD ROAD, DERBY
'Phone: Derby 4266 (3 lines) 'Grams: Dania, Derby



THE CHEMISTS' PRINTERS FOR OVER SIXTY YEARS

THOMAS WAIDE & SONS, LTD.
KIRKSTALL HILL
LEEDS

Mispep

TRADE MARK

For over 80 years Mist. Pepsinae Co. c. Bismutho (Hewlett's) has enjoyed a unique reputation as a specific in all **Gastric and Digestive Disorders**.

We now present this preparation in a new form under the title of "**MISPEP.**"

It is packed ready for immediate use in two convenient sizes and may be prescribed with confidence in all disorders of the stomach and digestion.

In amber bottles of 8 and 20 fluid ozs.

Manufactured only by

C. J. HEWLETT & SON, LTD.
35-43, Charlotte Road,

LONDON, E.C.2

PATA

"ADVANCE IN PRICE"

LOSALL'S HALIBUT LIVER OIL CAPSULES

RETAIL PRICE 1/8 .. 12/6 doz.

-do- 3/4 .. 25/- doz.

TAX FREE

WE CAN SUPPLY BY RETURN POST

LOFTHOUSE & SALTMER LTD.



MANUFACTURING CHEMISTS

HULL

*English
Filter*

POSTLIP

Papers

SQUARES
CIRCLES
FOLDED
ROLLS

WHITE
GREY
PLAIN
ANTIQUE
EMBOSSED
CRINKLED

SAMPLES
FREE

*Postlip Filterings are stocked by all the leading Wholesale
Laboratory Dealers*

Evans, Adlard & Co Ltd

Postlip Mills, Winchcombe, Cheltenham



Manufacture still
prohibited—but worth
waiting for.
Keep the name in mind.

Wholesale only

Made by

JACQUESIL FABRICS LTD
RED BANK MILLS - RADCLIFFE - LANCS

PATA

RETAIL
PRICE50s - 3/4;
500s - 27/8s

EXCLUDING POSTAGE & TAX

BIOLOGICAL TREATMENT OF
CONSTIPATION
 CONTINENTAL LABORATORIES LTD. 101, Gt. RUSSELL St., W.C.1.

*Ample supplies available
 In case of difficulties
 communicate direct with us*



VERDIERS MANICREEM

Hand Protective Cream

TAKES DIRT OUT OF WORK

Protects instantly against DIRT—CRIME—
 STAINS—CHAFING. Does not make the
 hands sticky. Leaves them clean, smooth
 and healthy. No soap or hot water needed.
 18/9 per dozen, plus 6/3 P.T. Retail Price 2/11 per jar.

* VERDIERS LTD *

Manufacturing Chemists
 33 OLD COMPTON STREET, LONDON, W.1
 TEL: LONDON 1-2517

ARGOTONE + DELTAMIN

NASAL & EYE DROPS

MIGRAINE TABLETS

RONA LABORATORIES LTD., 159 Finchley Rd., N.W.3

NIPITS

PASTILLES

FOR
 VOICE, THROAT
 AND CHEST

Made by
 TEASDALE & CO. LTD. CARLISLE

GROUND DRIED YEAST

MIDGLEY & PARKINSON, LTD.
 WARREN WORKS, PUDSEY LEEDS

MILLAMALT *The* **VITAMIN
 MALT FOOD**

With Vitamins (A. 6,500 I.U., D. 400 I.U.)
 per fl. oz.

JEFFREYS, MILLER & Co. Ltd. Leyland Mills, WIGAN. London Dept. 19 Brookside Rd. N.19

At 5 months baby needs a CEREAL FOOD

Recommend M.O.F.—the *fortified* Infant Cereal

AT about 5 months mixed feeding should begin. At this stage it is usual to include a cereal food in the infant's diet. This is the time when an infant needs M.O.F.—the fortified infant cereal.

M.O.F. is a finely sieved oat flour fortified with Vitamin D, Calcium, Phosphorus and Iron and specially processed for quick cooking.

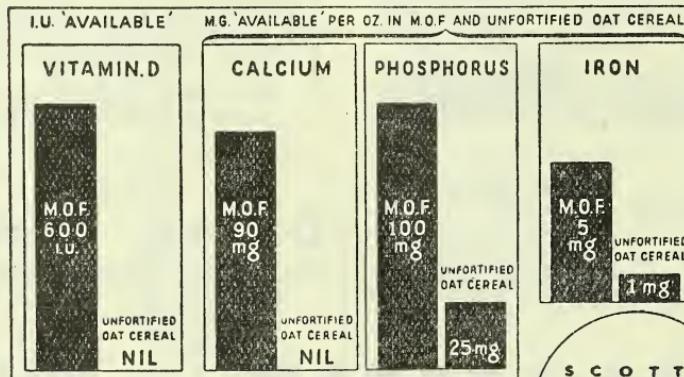
WHEN AND HOW TO GIVE IT

The use of M.O.F. normally begins with the introduction of mixed feeding. It should be made to a thick consistency and may be spoon fed before the normal breast or bottle feed. Small quantities given at first should be increased as the infant progresses, M.O.F. forming one of the staple factors of a mixed diet.

Where artificial feeding must start at an early age M.O.F. can be given as from 3 months.

HOW DOES IT COMPARE WITH OTHER CEREAL FOODS?

One of the reasons why progressive medical opinion recommends M.O.F. is because it is more than a cereal. M.O.F. is a fortified food. How it compares with non-fortified infant cereals can be seen in this chart.



M.O.F. IS PREPARED BY A. & R. SCOTT LTD.
WEST MILLS, COLINTON, MIDLOTHIAN, SCOTLAND.



New!

BRUNITEX

THE BRUNETTES SHAMPOO

THE MANUFACTURERS OF STA-BLOND REPLY TO
THE PERSISTENT QUESTION...

*"Why don't you create
a Shampoo for Brunettes as
good as Stā-blond is for Blondes?"*

Since their overwhelming success, starting in the U.S.A. 25 years ago, the manufacturers of Sta-blond have stuck to blondes. Sta-blond became, in the 26 countries in which it is widely known, the largest selling blonde hair shampoo in the world.

To answer the demand for a brunettes shampoo we have been conducting research for a number of years—without success. But recently we found 2 wartime chemical discoveries which justify us bringing out—

BRUNITEX SHAMPOO

containing 2 ingredients which have a remarkable beautifying effect upon all darker shades of hair.

New COLOCEL ingredient enriches natural colour of dark hair

This is a gentle toning agent which enriches by several shades the natural colour of any

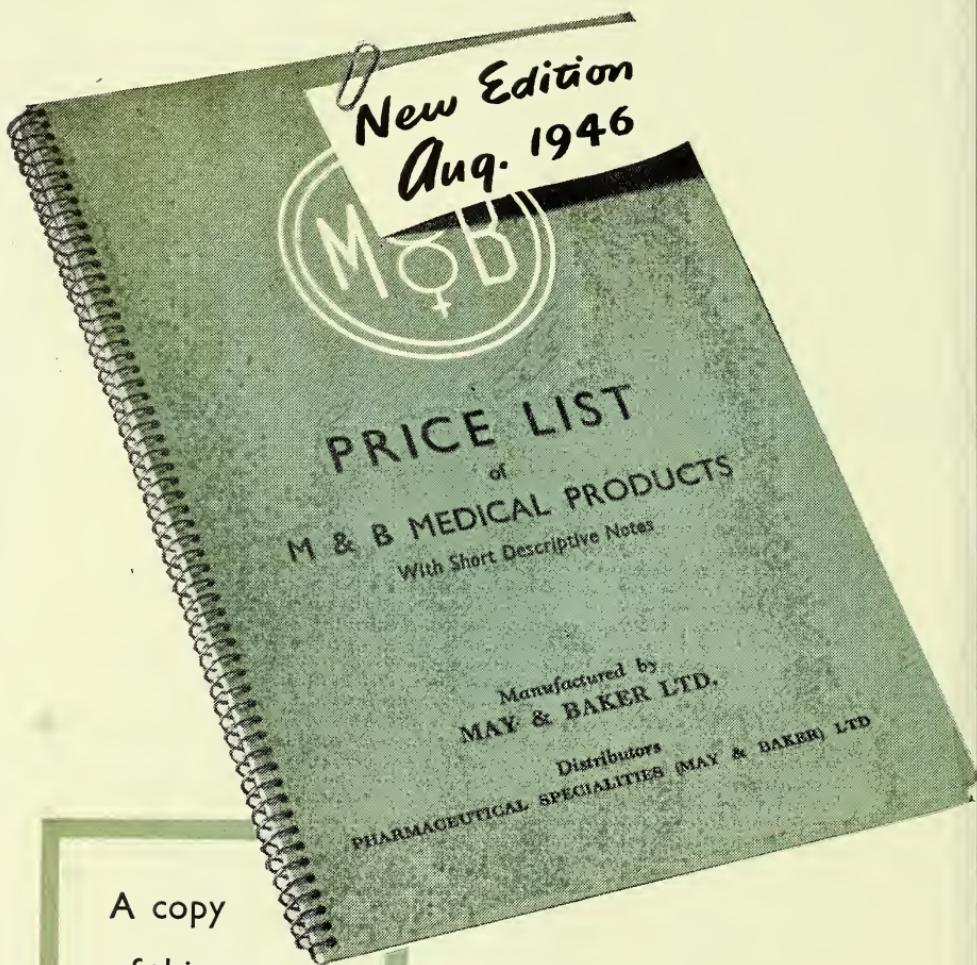
STA-BLOND LABORATORIES LTD., 128-134 BAKER'S STREET, LONDON, W.1.
L. C. Gamble & Co. Ltd., 209-215 Blackfriars Road, London, S.E.1.

dark tone of hair. It has a special effect upon those indefinite tones, such as sandy, brownish or blackish. It is not a dye and will not change the natural colour of the hair. But it does brighten it.

New LANÆL ingredient stops "dry scalp"

This is an amazing concentrate which prevents and remedies the scalp dryness which comes largely from the use of some hair preparations. It puts back an oil into the hair roots which resembles, as near as possible, the natural oil in the human scalp, so stimulating hair growth, health and thickness.

Brunitex is the first new development in shampoos since they first came into use—otherwise we would not have brought it out. So there is real justification for your recommending it as something entirely new, different and reputable. Advertising is appearing now in national newspapers and magazines, but you, too, can help by displaying Brunitex in its beautiful six-coloured envelope. Brunitex is the same price as Sta-blond.



A copy
of this new
price list will
gladly be sent
on request.

PHARMACEUTICAL SPECIALITIES (MAY & BAKER) LTD., DAGENHAM



Tangee

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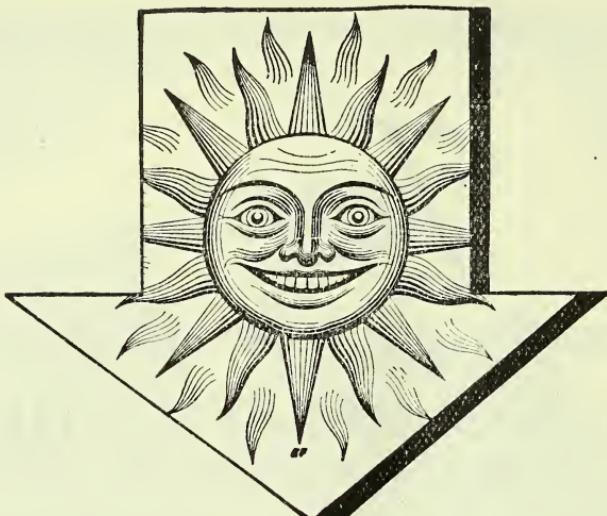
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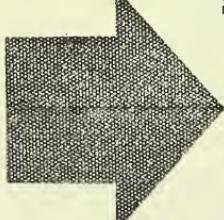
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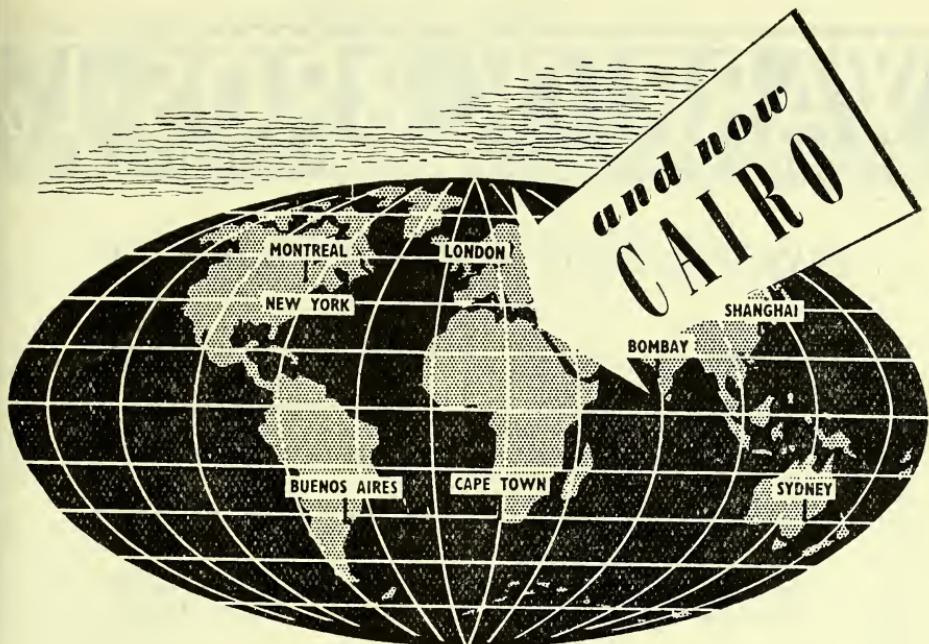
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NEWS OF THE WEEK

Vitamins for Liverpool Police. — The Liverpool Watch Committee has sanctioned the purchase of vitamin capsules for members of the police force and other employees of the committee, at a cost of approximately £500.

Travellers' Schools Speech Day. — At the speech day of the Royal Commercial Travellers' Schools, Hatch End, Middlesex, held recently, Mr. Paul S. Cadbury delivered an address, and Mrs. Cadbury made the distribution of prizes.

Drug Company's Extensions. — Beechams Pills, Ltd., are to build a new factory at St. Helens, Lancs., at an estimated cost of £125,000. Work on the factory has already commenced, and it is scheduled for completion by the end of 1947.

Social Survey Permanent. — The wartime Social Survey, which produced weekly confidential reports for the Cabinet, has been made permanent as a branch of the Central Office of Information. A report on silicosis is shortly to be submitted by the Survey to the Ministry of Health, and a

report on diphtheria immunisation is in course of being prepared.

Company's Cricket Match. — The annual cricket match between the Chemical Laboratory, Cambridge, and Townson & Mercer, Ltd., laboratory furnishers, Croydon, resulted in a draw at Cambridge recently. The company's side declared at 191 for the loss of six wickets, and their opponents scored 129 for eight wickets. Professor A. R. Todd welcomed the Croydon side during tea, and Mr. S. G. Jones (manager, chemical department, Townson & Mercer, Ltd.) replied.

Road Accident. — Mr. G. Adam, 160 Onslow Drive, Glasgow, is detained in Perth Royal Infirmary following a motoring accident on the Milnathort-Cupar road, as a result of which two doctors were killed. The car, in which the men were on their way to St. Andrews, touched the verge of the road, swerved, and overturned. It was only with difficulty that the occupants were dragged from the wreckage. Both doctors were Glasgow men.

Typhoid at Aberystwyth.—Carrier infection conveyed by the maker and seller of a barrel of ice-cream is suspected to be the cause of the recent outbreak of typhoid fever in Aberystwyth. A Widal test on the man and a Vi antigen test, indicating the presence of living bacteria, proved positive, and the man gave a history of having typhoid fever in 1938. Evidence strongly suggested that he was still excreting *B. typhosis*. It is thought that further cases may occur up to the middle of August.

Presentation to Retiring Employee.—To mark his retirement after forty-eight years' service, Mr. Harry Huckle (foreman of the malt extract factories of Paine & Co., Ltd., St. Neots, Hunts,) was presented with an inscribed gold watch, recently, on behalf of the company, and with a gold chain from the employees of the company. The presentations were made by Mr. A. W. McNish (chairman of the company), and Mr. T. Wright (a member of Mr. Huckle's staff for forty-four years).

Welwyn Garden City Exhibition.—An industrial exhibition is being held at the Welwyn Stores, Welwyn Garden City, until August 31. The products of nearly thirty of Welwyn's industries are on display at the exhibition which was opened by Mr. J. W. Belcher, M.P., Parliamentary Secretary to the Board of Trade, on August 6. The industries represented include: Carnegie Chemicals (Welwyn), Ltd., Herts. Pharmaceuticals, Ltd., I.C.I. (Plastics Division), Ltd., Roche Products, Ltd. The exhibition is open daily from 10 a.m. to 4 p.m.

Road Transport of Goods.—In accordance with the arrangements which have been agreed with the Road Haulage Association to come into force when the Government's Road Haulage Organisation as at present constituted comes to an end at midnight August 16-17, the Minister of Transport has made an Order revoking, as from August 17 the Road Transport of Goods Order, 1944, which places restrictions on the movement of goods by road for distances over sixty miles.

International Penicillin Unit.—The international unit for penicillin which was defined by the Health Committee of the League of Nations at a conference in London in 1944, but was not disclosed, is referred to in the Bulletin of the League's Health Organisation, 1945-46, recently published. A pure crystalline preparation of a sodium salt of penicillin II (or G) was taken by the Conference as a standard preparation, and the international unit was

defined as "the specific actively contain in 0.6 microgramme of this standard," the unit being approximately equivalent to the Oxford unit. The conference further adopted a working standard for general distribution to laboratories consisting of a calcium salt of penicillin, 2.7 micrograms which would contain 1 international unit.

"Britain Can Make It" Exhibition.—A conference was held on July 22 to report progress on the "Britain Can Make It" Exhibition. Sir Cecil Weir, who supervised the arrangements for liaison with industry, presided. The council, he said, wished to acknowledge the support and co-operation which had been so willingly given by the industries concerned. The position of firms submitting new designs and inventions had been strengthened by the recent decision of the Board of Trade to certify the Exhibition as an industrial exhibition for the purpose of the Patents and Designs Act, 1907-1944. Concerns which wished to avail themselves of the protection of the Act, should, before exhibiting their inventions or articles, inform the Comptroller-General of Patents and Designs and Trade Marks at the Industrial Property Department, Board of Trade, Southampton Buildings, London, W.C.

Ph.C. Examination Results.—The following candidates satisfied the Examiners in the July Pharmaceutical Chemist Qualifying examinations in England and Wales:—Anthony, Michael Ignatius, Bournemouth; Beattie, David Morgan, Mill Hill; Boot, Stanley, Liverpool; Campbell, Mary Elizabeth, Hackney; Casbolt, Jack Alfred, Cambridge; Cole, Clarence Stuart, Birmingham; Crowther, Kenneth, Wednesbury; Evans, William Charles, Lewes; Fry, Joh Alexander, Wanstead; Jones, John Francis Humphreys, Carnarvon; Kayes, Almon John Bratt, Malvern; Keepe, Winifred Giam, Manchester; Lovell, Barbara Jean Dartford; Lowe, Joan Ethel, Ipswich; Pascoe, James Edward, Canonbury, London, N.1; Reynolds, Pamela Violet, Ladywell, London, S.E.13; Williams, Joan, Bath. The following passed in Scotland:—Bennett, George Murray, Peterhead; Clarke, Marshall, Oldham; Clegg, Barbara Winfred, Baguley; Cooper, Alan Harold Gries, Halifax; Cunnah, Geoffrey Osborne, Leeds; Forrest, Joan, Chapmore End, Nr. Ware; Hediger, Rene, Edinburgh; Hopper, Barry, Sunderland; Kershaw, Roy, Littleborough; Lumb, Irene, Sowerby Bridge; Lumby, Kenneth, Leeds; Parr, Robert Fred, Southport; Raper, Thomas Bulmer, Alnwick; Stringer, Arthur Norman, Bury; Watson, Thomas John, Polmont.

COMPANY NEWS

H. SMART, CHEMIST, LTD. (P.C.).—Capital £2,000. Chemists, etc. Violet, Charles O., and Mabel J. Smart, directors. R.O.: 41 Beach Road, Littlehampton.

M. & J. CHEMICALS, LTD. (P.C.).—Capital £100. Manufacturers of and dealers in chemicals, etc. Marie Braley, director. R.O.: 6 Broad Street Place, London, E.C.2.

JULES COPPE, LTD. (P.C.).—Capital £7,500. Scientific glass manufacturers, etc. Jules and Joseph J. Coppe, directors. R.O.: Saville Place, Newcastle-on-Tyne.

MULTIPRO, LTD. (P.C.).—Manufacturers of agents for and dealers in chemicals, etc. Directors to be appointed. R.O.: 71 Ongate, London, E.C.2.

ROSE MAY, LTD. (P.C.).—Capital £100. Chemists, druggists, etc. May Muller, director. R.O.: 40 Greyhound Road, London, S.W.6.

NEWCHEM, LTD. (P.C.).—Capital £5,000. Chemists, druggists, etc. Percy and Blanche E. Charlesworth, directors. R.O.: 183 London Road, Poynton, Cheshire.

R. & J. M. NICHOLSON, LTD. (P.C.).—Capital £1,000. Chemists, druggists, etc. Robert and Janet M. Nicholson, directors. R.O.: 3 Station Road, Langley, Worcs.

MONA LABORATORIES, LTD. (P.C.).—Capital £100. Manufacturers of and dealers in pharmaceutical preparations, etc. R.O.: 14 Waterloo Place, London, S.W.1.

B. MYERS DRUG STORES, LTD. (P.C.).—Capital £100. To carry on business as indicated by the title. Benjamin Myers, director. R.O.: 204 Mare Street, London, E.8.

WADSWORTH (CHEMISTS), LTD. (P.C.).—Capital £100. To carry on business as indicated by the title. Solicitors: Rowe & Maw, Kimberley House, Norfolk Street, London, W.C.2.

GLAMIOR, LTD. (P.C.).—Capital, £1,500. Manufacturers and merchants, particularly in toilet requisites, etc. George Herbert and Eric A. M. Gee, directors. R.O.: 20 Essex Street, London, W.C.2.

TURNER—THE CHEMIST, LTD. (P.C.).—Capital £3,000. Pharmaceutical chemists, druggists, etc. Florry and Scriven J. Turner, directors. R.O.: Harrow Road, London, N.W.10.

PARAGON DRUG CO., LTD. (P.C.).—Capital £1,000. Chemists, druggists, etc. Sidney J. Legon, and George Papaspyrus, directors. R.O.: 19 Eastcheap, London, E.C.3.

SMITH & MAINPRIZE, LTD. (P.C.).—Capital £5,000. Chemists, druggists, etc. John Myers Smith and Norman H. Mainprize, directors. R.O.: Martins Bank Chambers, Tyrrel Street, Bradford.

T. BURGESS (WEST END) CHEMISTS, LTD. (P.C.).—Capital £1,000. To carry on the business indicated by the title. Leslie Miles and Gwylim Evans, directors. R.O.: 12 Fouberts Place, London, W.1.

LOUNARD, LTD. (P.C.).—Capital £2,000. Manufacturers of and dealers in cosmetics, etc. Harry G. Gartside and Charles L. Menson, directors. R.O.: 39 South King Street, Manchester.

VERMEX CHEMICAL CO., LTD. (P.C.).—Capital £2,000. Manufacturers of and dealers in chemicals, etc. Benjamin A. Walker, Cyril H. Quinn and John Shaw, directors. R.O.: 20 Queen Street, Blackpool.

SIMS (THE CHEMISTS), LTD. (P.C.).—Capital £300. Manufacturers of and dealers in drugs, chemicals, etc. Lewis J. Sims and Clarence Bowrey, M.P.S., directors. R.O.: 88 Barrow Road, Bristol, 5.

R. J. JONES (NEVIN), LTD. (P.C.).—Capital £2,000. To acquire the business of a chemist and druggist carried on by Mrs. M. E. Jones at Shop-y-Maes, Nevin. Mary E., and Robert J. Jones, directors. R.O.: Shop-y-Maes, Nevin, Caernarvonshire.

CLIMAX CHEMICALS, LTD. (P.C.).—Capital £250. To carry on business as indicated by the title. Gwendoline E., and Leslie K. Weech, and Leslie Dunvein, directors. R.O.: 53 Norwood High Street, West Norwood, London, S.E.27.

MEDOPHARMA, LTD. (P.C.).—Capital £2,000. Manufacturers of and dealers in pharmaceutical, chemical, industrial and other preparations, etc. Norman Breet, director. R.O.: 9 Arundel Street, Strand, London, W.C.2.

C. THOMPSON, LTD. (P.C.).—Capital £1,000. Manufacturers, wholesale sundriesmen and retail distributors of medicines, foods and chemicals, etc. Cyril F., and Dudre Thompson, directors. R.O.: 61 Cambridge Park, Wanstead, London, E.11.

YEWSCOME SUPPLIES, LTD. (P.C.).—Capital £500. Manufacturers of and dealers in chemists' and druggists' sundries, etc. Charles Jude and Horace P. Nutbrown, directors. R.O.: 15 Mary Street, Sunderland.

BUSINESS CHANGES

ANGLO-AFRICAN SHIPPING CO., LTD., have removed to 99-100 Fenchurch Street, London, E.C.3. (Telephone: Royal 8261).

MR. JOHN SMITH, M.P.S., has purchased the business of Mr. R. D. Wellwood, M.P.S., 47 Stobcross Street, Glasgow, C.3.

KORAY, LTD., 25 Hanover Square, London, W.1 have changed their telephone number to Mayfair 9161-7.

MR. OLIVER PEMBLETON, M.P.S., has been appointed pharmacist to the Royal Cornwall Infirmary, Truro. He was previously deputy chief pharmacist to the Westminster Hospital, London.

MR. F. BELL, Ph.D., D.Sc., F.R.I.C., 25 Higher Greaves, Lancaster, has been appointed Head of the Chemistry Department of the Belfast College of Technology. He succeeds Professor Wray who has retired.

HIRST, BROOKE & HIRST, LTD., Sheepscar Works, Leeds, 7, have appointed Mr. T. D. Polley buyer of proprietary articles in addition to the buying of bottles, caps, and containers generally. The company also announces that, in future, representatives can only be seen between the hours of 10 a.m. and 4 p.m. Monday to Friday inclusive.

NORTH BRITISH RUBBER COMPANY, LTD., have purchased premises at 181-85 Morrison Street, Edinburgh, for housing the company's North-Eastern branch. Mr. W. Campbell has been appointed manager of the branch. Other changes in the company's staff include the appointment of Mr. A. Broady as manager of the Manchester branch, and of Mr. J. McElroy as manager of the Glasgow branch.

BURROUGHS WELLCOME & CO., Cairo House.—To serve the increasing needs of their business interests throughout the Middle East, Burroughs Wellcome & Co. (The Wellcome Foundation Limited), London, have established a branch in Cairo, to be known as Burroughs Wellcome & Co. (Middle East). Mr. H. B. Lomas, formerly on the staff of Burroughs Wellcome & Co., London, has been appointed manager. The functions of the Cairo branch will be administrative and advisory. Distribution of the company's products in the Middle East will continue to be carried out by agents in the principal commercial centres throughout the territory. The address of Burroughs Wellcome & Co. (Middle East) is: Immobilia Building, Cairo. Post Office Box No. 2134.

C. & D. DISPENSING PRICE LIST

THE following changes in the dispensing prices of drugs and galenical preparations listed in THE CHEMIST AND DRUGGIST Dispensing Price List took place during the month of July:

Cost	Due allowance has been made for purchase tax in both cost and dispensing prices			Dispensing price		
	4 oz.	1 oz.	1 c.	4 oz.	1 oz.	1 c.
d. per						
20 oz.	Acid salicylsulphonic ..	s. d.	s. d.	s. d.	2 11	0
150 lb.	Camphora ..	—	—	—	1 7	0
14 gr.	Cantharidinum S.I.(4)	—	—	grain	2	—
31 oz.	Chlorbutol ..	—	—	—	—	0
162 lb.	Copaiba ..	5 9	1 8	0	—	—
80 lb.	Dec. pavav. et anthem. conc. P.I.(9)	3 0	0 10	0	—	—
238 lb.	Elixir viburn. et hydrast B.P.C. ..	9 8	2 11	0	—	—
114 lb.	Emuls. menth. pip. ..	4 1	1 2	0	—	—
27 oz.	Ext. bellad. liquidum S.I.(5) ..	—	4 0	0	—	—
31 oz.	Ext. bellad. siccum. S.I.(5) ..	—	4 8	0	—	—
84 lb.	Ext. cascara sag. liquidum ..	3 2	0 11	0	—	—
29 oz.	Ext. colchici corm liq. S.I. ..	—	4 3	0	—	—
252 lb.	Ext. ergot. liq. S.I.(5)	9 0	2 9	0	—	—
83 oz.	Ext. ippecac. liq. ..	—	12 0	0	1	—
13 oz.	Ext. stramonii liq. S.I.(5) ..	—	1 11	0	—	—
98 lb.	Glyc. pancreatin, B.P.C.	4 2	1 2	0	—	—
210 lb.	Inf. rhei. conc. ..	7 7	2 3	0	—	—
133 lb.	Inf. senega conc. ..	4 10	1 4	0	—	—
66 lb.	Kayara pulv. ..	2 5	0 8	0	—	—
42 lb.	Linectus scillae co., P.I.(13) ..	1 9	0 6	0	—	—
36 lb.	Lin. methyl salicylatis, B.P.C. ..	1 7	0 5	0	—	—
98 lb.	Liq. quin. ammon. ..	3 6	1 0	0	—	—
49 lb.	Liq. strych. hydrochlor, S.I.(5) ..	1 9	0 7	0	—	—
147 lb.	Lobeliae pulvis P.I.(8)	5 3	1 6	0	—	—
55 oz.	Menthol ..	—	8 1	0	—	—
56 oz.	Ol. hippocrossi ..	—	8 2	1	—	—
75 oz.	Ol. lavand., B.P. exot.	—	10 9	1	—	—
16 lb.	Plumbi oxidum (lithage)	0 8	0 2	—	—	—
70 lb.	Pulv. lobeliae co. ..	2 6	0 9	0	—	—
189 oz.	Quinidina ..	—	gr. x.	0	—	—
105 lb.	Spt. aetheris ..	3 0	0 10	0	—	—
42 lb.	Syr. chloralis P.I.(9)	2 0	0 7	0	—	—
54 lb.	Syr. ippecacuanha ..	2 6	0 9	0	—	—
91 lb.	Tr. belladonnae P.I.(9)	3 4	0 11	0	—	—
98 lb.	Tr. digitalis S.I.(9) ..	3 6	1 0	0	—	—
84 lb.	Tr. ippecacuanha ..	3 0	0 10	0	—	—
74 lb.	Tr. opii camphorata P.I.(9) ..	2 8	0 9	0	—	—
22 lb.	Ung. acidi borici ..	0 10	0 3	0	—	—
63 lb.	Ung. chrysarobini ..	2 4	0 8	0	—	—
49 lb.	Ung. eucalypti, B.P.C. ..	1 9	0 6	—	—	—
154 lb.	Ung. gallice c. opio, S.I.(5) ..	5 3	1 6	0	—	—
42 lb.	Ung. hamamelidis ..	1 6	0 6	—	—	—
77 lb.	Ung. ichthammol. co., B.P.C. ..	2 10	0 9	—	—	—
64 lb.	Ung. resorcinol, B.P.C. ..	2 8	0 9	—	—	—
122 lb.	Ung. resorc. et bism. co., B.P.C. ..	—	—	—	—	—
41 oz.	Vanillinum ..	4 4	1 2	0	—	—
72 lb.	Zinci chloridum (sticks)	2 7	0 9	0	—	—
72 lb.	Zinci oxidum ..	0 9	0 25	0	—	—

TOPICAL REFLECTIONS

uorine Limits Proposed

The announcement that the Ministry of Food proposes to issue an Order limiting the fluorine content of certain substances used as foods or as ingredients in articles for human consumption (p. 162) is of considerable interest. This element needs to be kept under observation, so to speak, till its physiological effects, actual and potential, are better understood. Here I can only briefly sketch the history of control over deleterious intruders into foods—under which designation beverages may for our present purpose be included—and components of food. (Deliberate adulteration for the purpose of increasing profit is, of course, another matter.) The three principal milestones on the road are, I suggest, the reports of the Local Government Board Committee of 1899 and of the Royal Commission on Arsenical Poisoning of 1901, and the passing of the Public Health (Preservatives, etc., Food) Regulations, 1925. The 1899 Committee recommended, among other things, that the use of formaldehyde in foods and drinks be prohibited; that salicylic acid to a maximum of one grain per pint or pound be permitted; that boric acid, with or without borax, be allowed in cream up to 0.25 per cent. calculated as boric acid; and that the use of salts of copper be prohibited. Subsequent prosecutions for introducing higher proportions of salicylic acid failed, evidence owing conclusively that the larger amounts in question were necessary for the purpose and were harmless.

Royal Commission of 1901

The 1901 Royal Commission on Arsenical Poisoning came into existence as a result of an outbreak of poisoning in Lancashire. Whether all the cases were, as was alleged at the time, due to arsenic in beer we need not now inquire. Selenium came into the story for a while, but soon dropped out. Among those who gave evidence before the commission were Mr. William Kirkby and Mr. A. P. Luff. So sensational an event had its natural consequence in the analytical sphere. A report of a crowded meeting of the Society of Chemical Industry, occupying more than four (quarto) columns

THE CHEMIST AND DRUGGIST of February 23, 1901, shows that the relative merits of the tests of Marsh, Einsch and Gutzeit were there discussed with common sense and with humour. A brewer thought the proposed

limit of 0.01 grain of arsenic per gallon too severe. Another speaker declared that North Country analysts were losing their heads over the problem. He was followed by Mr. A. H. Allen, of Sheffield, who remarked that an analyst did not want to make his certificate a stalking-horse for prosecution, and indicated the difference between certifying that arsenic had not been found and stating that none was present. Your readers will hardly need to be reminded that in the end the Gutzeit test, as improved, took precedence over the other two tests. A drawing of the apparatus for this test, designed by Mr. F. C. J. Bird, a well-known pharmacist now living in retirement, appeared in your issue of April 13, 1901.

Precautions for Food and Drugs

The Food Preservative Regulations (as we may briefly call them) of 1925 are so much with us that further reference to them would be superfluous. It may be mentioned that the Committee appointed by the Minister of Health in 1923 to consider the use of preservatives and colouring matters in food recommended in its report (II.2) that preparations used in food should contain not more than 0.01 grain of arsenic nor more than one-seventh of a grain of lead per lb. We may fairly attribute the interest of the General Medical Council in lead and arsenic limits for chemicals—in part, at any rate—to the reports of the L.G.B. Committee of 1899 and the Royal Commission of 1901. It is instructive to compare the "Characters and Tests" sections of chemicals common to the 1898 and 1914 British Pharmacopæcias. Glancing through the sodium salts, for instance, I find that in the 1898 Pharmacopæcia the possibility of arsenium being found as an impurity is not mentioned in the monographs on sodium benzoate, bicarbonate, carbonate, exsiccated carbonate, chloride, hypophosphite, nitrite, phosphate, salicylate, sulphate, and sulphite, each of which has its arsenic limit in the 1914 B.P. In 1898 most of these salts were required to "yield no characteristic reaction" with tests for lead (and other bases and salts), but limits were not specified. In 1914 the preface stated: "It has been found desirable to indicate a limit to the proportion of lead or of arsenic permissibly present as an impurity in many pharmacopæcial substances." It was not too early for this decision.

Xrayer

BIRTHS

BRODIE.—At Lennox Castle, on August 7, Margaret, wife of David R. Brodie, M.P.S., 30 Derby Street, Glasgow, C.3, of a son and daughter.

LEMON.—On August 11, the wife of A. E. Lemon, M.P.S., Dell View, Coombe Bridge Avenue, Bristol, 9, of a son.

MILLER.—At Norwood Nursing Home, Glasgow, on August 6, Harriet, wife of Alexander Miller, M.P.S., 330 Crown Street, Glasgow, C.5, of a son.

YORSTON.—At Carnegie Nursing Home, Edinburgh, on July 30, Elizabeth, wife of Adam P. Yorston, M.P.S., 4 Paisley Grove, Edinburgh, 8, of a son and daughter.

MARRIAGE

PARRY-MCCARTER.—Recently, William Thomas Parry, M.P.S., Erw Goch, Newborough, Llanfairpwll, Anglesey, to Eileen V. McCarter, Bethesda.

DEATHS

CARMICHAEL.—On August 7, at West Rockfield, 301 Perth Road, Dundee, Mr. James Carmichael, a director of Jobsons, Ltd., manufacturing chemists, Dundee.

MATZ.—Killed recently in an accident while flying his aeroplane to the Pacific Coast, Mr. Sidney Matz, aged forty-seven, president of Ex-Lax, Ltd., Slough. The funeral took place in New York on July 25.

MONK.—On July 27, Mr. Frederick Albert Monk, Alton, Hants, aged eighty-seven.

ROWLAND.—On August 8, at 81 Holland Road, London, W.14, Mr. Ernest Osmond Rowland, M.P.S. Mr. Rowland was a partner of C. & C. Rowland, 7 Castle Street, Edinburgh, from 1908 to 1915, and had recently retired after many years as a representative of Wright, Layman & Umney, Ltd., Southwark Street, London, S.E.1. Mr. Rowland qualified in 1905.

WELLS.—On August 13, Mr. Herbert George Wells, aged seventy-nine, author, scientist and educationist. Mr. Wells was born in 1866 and at one time became a chemist's apprentice.

WILLIS.—On July 27, Mr. Ernest Willis, M.P.S., "Dalkeith," Grosvenor Road, South Shields, aged seventy.

WILLS

MR. JEREMIAH HARRISON, M.P.S., King Street, Clitheroe, Lancs., left £7,25 with net personality £6,520.

MR. WILLIAM ROWLAND, M.P.S., 9 Bosworth Place, South Shore, Blackpool, left £3,096, with net personality £2,189.

MR. JOHN REES JONES, M.P.S., 72 East Road, Tylorstown, Glam, left £8,664, with net personality £8,500.

MR. FREDERICK KNOWLES, Ivy House, Thornhill Lees, Dewsbury, formerly glass bottle manufacturer, left £13,887, with net personality £13,796.

MR. ARTHUR WILLIAM DOLPHIN, 25 Southbourne Grove, Westcliff-on-Sea, formerly surgical boot maker, left £8,21 with net personality £2,357.

MR. JOHN ERNEST SIMPSON, Neals Inn, Paines Lane, Pinner, Middlesex, former medical publisher, left £16,275, with net personality £10,471.

MR. GILBERT FRANCIS THOMAS CONDOR PEARCE, M.P.S., 54 Lansdowne Road, Middlesbrough, left £3,120, with net personality £1,953.

MR. WILLIAM REDPATH, M.P.S., 12 Eltham Court Road, West Norwood, London S.E.27, left £3,125, with net personality £1,602.

MR. FREDERICK CAVENDISH WARD, M.P.S., Broom Bank, Mancetter Road, Atherstone, Warwickshire, left £1,605, with net personality £571.

MR. JOHN BRINDLEY, M.P.S., Nettleback House, Hanley Road, Smallthorne, Stoke-on-Trent, left £1,590, with net personality £1,474.

MR. FEDERICO LESSER, 12 Hyde Park Place, London, W.2, former joint managing director of Borax Consolidated, Ltd., left £9,727, with net personality £5,690.

MR. LESLIE PIPER, M.P.S., 66 Valley Road, Ipswich, and The Worsley Pharmacal St. Nicholas Street, Ipswich, left £8,16 with net personality £6,636.

MR. CHARLES BARKER, M.P.S., 10 Meersbrook Park Road, Sheffield, and formerly of Burnley, Lancs, left £5,745, with net personality £5,636.

MR. GEORGE POOLE, 62 Copleston Road, Peckham, London, S.E.15, formerly surgical instrument maker, of Iliffe Yard, Crampton Street, Newington Butts, London, S.E.17, left £4,327, with net personality £4,262.

SURREY PHARMACEUTICAL COMMITTEE'S REPORT

DECREASE of approximately 10,000 in the number of National Health Insurance Act prescriptions dispensed in 1945 compared with 1944 is shown in the thirty-second annual report of the Surrey Pharmaceutical Committee published recently. A rise of nearly 8,000 in the average number of insured persons, however, gives a present total 447,063. The average cost per prescription shows a rise of 1.1d. over the 1944 figure. A summary of the chemists' accounts for 1945 compared with the previous year's figures is given in the following table:

Number of Prescriptions	1944	1945
Ingredient Costs	£609,936	£599,450
Spending Fees	£54,857	£59,398
Total Value	£36,218	£38,203
Average No. of Insured Persons	£91,093	£97,600
Average Cost per Insured Person	439.157	447.063
Average Cost per Prescription	49.8d.	52.4d.
	13.6d.	14.7d.

£293 was given to the National Pharmaceutical Union's War Distress Fund, and 274 to the Pharmaceutical Society's War Fund, from contributions from the Penny in the Pound Scheme". The contributions have now been discontinued.

With one or two exceptions, the report states, the rota system has worked successfully, where adopted, and that the Committee is shortly to discuss with the Insurance Committee the consolidation of hours service.

Reminders to Chemists

On May 31, 1946, there were 628 pharmacies owned by 400 contractors on the Panel. These were divided thus:— 400 shops in ninety-five towns and villages in the County area and 228 shops in the neighbouring Counties, an increase of seven in the area, whilst the outer districts are reduced by two.

On May 31, 1946, there were 628 pharmacies owned by 400 contractors on the Surrey Panel. The report reminds chemists that the Secretary should be informed of any change of dispensing staff; and of any closures for holiday purposes or for the Christmas interval; that prescriptions for fourth Schedule poisons and dangerous drugs should be endorsed with the date upon which they were dispensed; and that the work of the Joint Pricing Bureau will be expedited if the chemists will stamp their name and address on the invoice form P.27 in addition to signing in the appropriate space before dispatching prescriptions to the Bureau.

PERSONALITIES

PROFESSOR W. H. ROBERTS has retired from the position of city analyst after fifty years' service with the Liverpool Corporation.

MR. F. W. BROWN, a director of Richard Baker & Co., Ltd., 158 Fenchurch Street, London, E.C.3, has taken up his duties again with the company following his release from the Royal Air Force.

MR. J. W. BEGBIE has recently retired after forty-three years of continuous service with the North British Rubber Co., Ltd. For the past thirty years he was manager of the company's Glasgow branch.

MISS MARIE CORDERY, for many years a member of the Pharmaceutical Society's staff at York Place, Edinburgh, was, on August 10, presented by the staff with a suitcase, writing case and fountain pen, on the occasion of her leaving the Society's employment to take up a post with the Control Commission in Germany.

MR. J. F. BYRNE, a director of Paines & Byrne, Ltd., Pabayn Laboratories, Bilton Road, Greenford, Middlesex, has recently returned from America where he has renewed business contacts in connexion with the manufacture of hormones, vitamins, agar and catgut products. Mr. Byrne speaks highly of the friendly receptions extended to him and believes that considerable business, to the advantage of both countries, will result from his visit.

MR. ROBERT HIGGISON, who has recently retired after forty-six years' service with W. & R. Hatrick, Ltd., manufacturing chemists, 158 Renfield Street, Glasgow, was presented with a wallet of notes from the staff and workers of the company. Acknowledging the presentation Mr. Higgison said "it is a long time to have been happy with one's fellow workers." Mr. George Mackay, the senior director of Messrs. Hatrick, advises us he joined the company in 1880 and asks if this is a record of continuous service with one firm in the drug trade?

Views on Apothecaries' Measure.—Cape Town chemists do not agree with the coroner who, at an inquest at Plymouth, England, recently, expressed the view that there was more room for mistakes in making up prescriptions when doctors writing them used the signs and symbols of the apothecaries' measure. Cape Town chemists argue that there is as much scope for error in the metric system as in the old one. With properly trained dispensers, they say, mistakes do not occur.

TRADE

NOTES

Medicated Chocolate Products.—An official announcement by the Ministry of Food is published in this issue that is of interest to all sections of the trade.

Nostroline Retail Price.—The makers of this product, Matthews Laboratories, Ltd., Clifton, Bristol, 8, announce in this issue an increase in price.

New Price List.—A new medical products price list has been issued by Ward, Blinksop & Co., Ltd., Brooklands, Halewood, Liverpool. Copies are available to the trade upon request.

Improved Formula.—The makers of Pregnuvite, Vitamins, Ltd. (Dept. C.P.Y.2), 23 Upper Mall, London, W.6, advise that nicotinamide and vitamin E have been added to this product. Details in this issue.

To Meet Increasing Export Demand.—Burroughs, Wellcome & Co. (The Wellcome Foundation, Ltd.) announce in this issue the opening of an administrative and advisory office in Cairo.

National Publicity Campaign.—The makers of Valpeda antiseptic foot balm, Dae Health Laboratories, Ltd., 17 Berners Street, London, W.1, announce in this issue a national publicity campaign in support of sales of this product.

Druggists Sundries in Plastics.—The advertisement of Rainos & Co., 225 Southwark Bridge Road, London, S.E.1, is a striking instance of the advantages of the use of colour in advertisements in relation to the goods advertised.

Five-day Working Week.—C. J. Hewlett & Son, Ltd., 35-43 Charlotte Road, London, E.C.2, wish to advise the trade that they introduced on August 12 a five-day working week for their offices, factory and warehouse.

New Edition of Price List.—May & Baker, Ltd. (Distributors, Pharmaceutical Specialities, May & Baker, Ltd.), Dagenham, have issued a new edition of their price list of medical products. A copy will be forwarded against applications from the trade.

Educational Session.—A new day session, commencing September 23, for the pharmaceutical and first medical examinations and evening courses for Intermediate B.Pharm. and other educational courses is advertised in this issue by the Northern Polytechnic, Holloway, London, N.7.

New Name for Anti-Cold Product.—Sold previously in liquid form under title "Oravic", this product is now packed in capsules and marketed under the name "Orasules". The makers, Calmic, Ltd., Westhoughton, Lancs., give trade details of this issue.

Science and Pharmacy Series.—This week's front cover advertisement, Burgoynes, Burbidges & Co., Ltd., London E.6, deals with a typical English chemist and physicist, Sir William Crooks, whose contributions to science include the discovery of thallium.

Portrait Drawings.—In response to inquiries, the address of Mr. A. E. (Dick) Baker, the artist who drew the twenty-five portraits of Chief Officers of Drug and Pharmaceutical Organisations (recently published in THE CHEMIST AND DRUGGIST), 40 Park View Road, New Eltham, London S.E.9.

Welding and Plant Repairs.—Reed Brothers (Engineering), Ltd., report that the equipping of their welding department at Albion Works, Alberta Street, Kennington, London, S.E.15, is now complete. They are accordingly in a position to undertake welding repairs, fabricating machines, plant and structures to customer requirements. Inquiries to head office, Bevis Marks House, London, E.C.3.

"Nivea" Toilet Preparations.—The makers of these products, Herts. Pharmaceuticals, Ltd., Welwyn Garden City, Herts, in their advertisement, point out that the Creme and other toilet preparations are manufactured and marketed by them under their registered trade mark "Nivea." A injunction was recently granted the company to restrain an infringement of the trade mark.

Advertisement Correction.—The advertisement of "SVC" of May & Baker, Ltd. (distributors, Pharmaceutical Specialist (May & Baker) Ltd.), Dagenham, on the front cover of last week's issue gave detail of "Suggested Tax per Unit" to be added to the retail price of this product. It is now announced that "SVC" is exempt from Purchase Tax and the amounts suggested to be added to the retail prices should be ignored.

Messina Citrus Oils.—Cugini Caminiti of Messina, producers of lemon, bergamot, sweet and bitter orange and tangerine essential oils, have appointed Chas. Zimmermann

Co., Ltd., 9 and 10 St. Mary-at-Hill, London, E.C.3, as sole consignees for the United Kingdom. Messrs Zimmermann wish to advise their clients that the oils from their source are guaranteed to conform to P. requirements and they will welcome inquiries when the de-control of citrus oils permits business again under normal conditions.

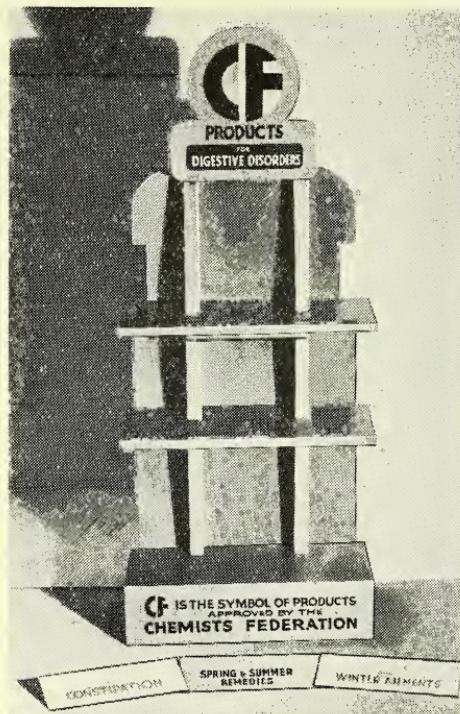
M.O.F. Points Free.—In order to avoid confusion which may have arisen following the announcement under the heading "Bread Units not Required" (C. & D., August 3, p. 130), A. & R. Scott, Ltd., West Mills, Colinton, Midlothian, state that their product M.O.F. (Midlothian Oat Food) is specially processed food, and although not specifically mentioned in recent Ministry of Food announcements regarding range in points values, is excluded from units under the heading of "Infant Food."

Patents and Trade Marks in Egypt.—A pamphlet on conditions in Egypt relative to patent, design and trade mark matters in which particular reference is made to the recently drafted patent law which it is expected will soon be enacted in Egypt. In general explanation of the position and the changes under the proposed new law the pamphlet, published by Lysaght & Co., P.O. Box 1795, Cairo, points out the necessity for British firms interested in the Egyptian market to take immediate steps to protect their interests.

Package-sealing Enterprise.—The president of the Ivers Lee Co. (Mr. Lloyd Volckening) arrived in Britain recently to conclude agreements with manufacturers of pharmaceutical and food products in Britain, and to carry through the necessary formalities for the formation of an English company: Ivers Lee (Great Britain), Ltd. The new company will operate exclusively in Britain the Ivers Lee Sanitape-Sealtite packing. A second company, Ivers Lee Proprietaries, Ltd., will be formed to produce in Britain the company's high-speed, fully-automatic packing system for drugs and food products. Branches of the concern are expected to be opened shortly in India and South Africa, and the British company's first foreign branch to commence operation in Paris during the present year. During his visit, Mr. Volckening will be staying at the Savoy Hotel, London, but the company's activities will be operated from 57-61 Mortimer Street, W.1.

C.F. Display Stand.—A new C.F. window display stand is now available from the Chemists' Friends' Association, 4-5 Queen

Square, London, W.C.1, at a nominal cost. The stand is solidly constructed in wood, cellulosed eau de nil with black lettering.



The dimensions are: height, 30 in.; width, 12 in.; depth, 6½ in. Four cardboard panels are supplied for insertion in the stand making it suitable for use with all types of C.F. products. It is understood that the title Chemists' Federation is shortly to be formally adopted.

COMING EVENTS

Tuesday, August 20

SWINDON & NORTH WILTS BRANCH, NATIONAL PHARMACEUTICAL UNION, No. 3 Committee Room, Town Hall, Swindon, at 7.30 p.m. Inaugural meeting. Mr. R. H. Kemp (local organisations officer) on "The National Health Service and Other Matters."

Wednesday, August 21

TROWBRIDGE & WEST WILTS BRANCH, NATIONAL PHARMACEUTICAL UNION, Wiltshire Insurance Committee Offices, Stallard Street, Trowbridge (near G.W.R. station), at 2.45 p.m. Inaugural meeting. Mr. R. H. Kemp (local organisations officer), on "The National Health Service and Other Matters."

Sunday, August 25

MANCHESTER PHARMACEUTICAL ASSOCIATION. Ramble to Edale, Great Hucklow, and Millers Dale. Meet Central station, 8.45 a.m. Book Edale return.

NEW BOOKS

Bulletin of the Health Organisation, League of Nations, Volume XII, No. 1. Biological Standardisation and Unification of Pharmacopœias, 1945-46.—League of Nations, Geneva. 6½ in. x 9½ in. 179 pp. 5s. Obtainable from Allen & Unwin, Ltd., (League of Nations Publications Department), 40 Museum Street, London, W.C.1. This number of the Bulletin is devoted entirely to the international biological and chemical standardisation of drugs. The work, embracing the standardisation of sera, hormones, vitamins and penicillin, conducted by the Commission on Biological Standardisation during the period 1935-45, is reviewed by Dr. R. Gautien, and a complete bibliography is given of papers published. Sir P. Hartley (director of biological standards, National Institute of Medical Research, London) describes measures taken to safeguard stocks of international standard sera, hormones, etc., during the war, and the technique for reproducing standard sera. An interim report by the Commission on the Unification of Pharmacopœias is introduced by a survey of the history of the work by Dr. C. H. Hampshire. The suggested table of nosology shown in the report; the forty-seven examples of pharmacopœial monographs; general rules for pharmacopœial form; and a list of drugs under consideration for inclusion in an international pharmacopœia, are of considerable practicable importance. (Comment on the progress made towards achieving an international pharmacopœia is made in the editorial columns of this issue on p. 209.)

Penicillin, Its Practical Application.—General editor, Professor Sir Alexander Fleming. 5½ in. x 8½ in. 380 pp. 30s. Butterworth & Co. (Publishers), Ltd., 11-12 Bell Yard, London, W.C.2. Under the imprimatur of Sir Alexander Fleming this book will be accepted as an authority on the use of penicillin. The work is not a continuous textbook but gives a series of independent contributions written by specialists. Professor H. Berry (Professor of Pharmaceutics, University of London) in a chapter on the "Pharmacy of Penicillin" describes fully the properties of penicillin; its stability; storage conditions; compatibility; regulations affecting the drug; the official and unofficial forms in which it may be dispensed; and elucidates the theory underlying the Pharmacopœial monographs on penicillin and its preparations. His notes on unofficial preparations, including penicillin and phenoxetol cream; penicillin

tablets; eye drops; lamellæ; spray solutions; insufflation powder; snuff; and halation should provide a useful guide practising pharmacists. Chapters forming the "Clinical Section" of the book, being written by medical, surgical, and other specialists, are not of primary concern to pharmacists, but formulæ for a penicil cream and a non-greasy penicillin jelly given by A. C. Roxburgh, M.D. (Physician for diseases of the skin, St. Bartholomew's Hospital, London) are worthy of note. The cream base is sterilised by heating at 65° for two hours, unlike the official method while the jelly is issued with special instructions to the patient for storage and handling. The history and development of penicillin and methods of assay, written by Alexander Fleming; its chemistry and manufacture (where deep-culture manufacture methods could well have been treated more generously), by A. L. Bacharach and B. A. Hems; and pharmacology of penicillin are among other chapters of pharmaceutical interest. The whole symposium contains fifty-nine illustrations including useful pictures of apparatus for administration by continuous drip and inhalation. The book is printed in good clear type on paper of excellent quality.

RADIO-ACTIVE ISOTOPES FOR RESEARCH

It is announced in Washington that the first radio-active isotopes were delivered on August 2 to research institutions in the U.S. for use in medical and biological research. The first peace-time products of the U.S. Government's huge atomic energy facilities were pea-sized units of carbon-14, which for the next 10,000 to 25,000 years will emit 37,000,000 beta particles per second, and will be used in research in connexion with cancer, diabetes, photosynthesis, carbon deposition in teeth and bones and in utilisation of rays by the human body. It is explained that plans of various laboratories receiving these radio-active isotopes contemplate the use of the isotopes in two important ways: first, as tracer atoms or "tracers" for following the course of atoms in chemical, biological and technical processes, and secondly, as possible therapeutic agents for the treatment of certain special diseases. The greatest benefits from these materials will most likely come, not from therapeutic uses, but by using the tracer technique in investigating the cause of disease and life process in general.

DRUG PLANT CULTURE IN EIRE

SUCCESSFUL experiment in commercial growing of medicinal plants in Ireland has been carried out at Leixlip, co. Kildare, by Mr. Christopher S. O'Connor, M.P.S.I. Mr. O'Connor, who is a keen botanist, and con-



Mr. O'Connor demonstrates the details of a plant to lady students

ucts classes in the subject for pharmaceutical students, carried out initial experiments on his own holding at St. Catharine's, Leixlip. When he first acquired the property he discovered the remains of what he believed was the site of a herb garden run by monks of the Order of St. Victor. Originally they had a monastery on the lands. The experiment was begun as a part-time occupation, and without State assistance of any kind. Owing to difficulty in securing seeds, plants, etc., during the war, he confined himself at the outset to growing belladonna, horehound (*Marrubium vulgare*), and verbascum or mullein, all of which were successful. By cultivating them successfully, Mr. O'Connor proved that the plants could all be grown with excellent results in land along the river Liffey, within fifteen miles of Dublin.

The first crop of belladonna, grown in 1944, was badly damaged by late frost and by unfavourable weather generally, but the second, in 1945, well justified the experiment. The plants were a fine healthy crop with an exceedingly good alkaloid content. The Dublin city analyst certified that plants from the 1945 crop had an alkaloid content of 0.69 per cent. in the leaf, against a British Pharmaceutical requirement of only 0.3 per cent. The crop that succeeded this yielded 0.49 per cent. Both crops were exported on a satisfactory basis. This year Mr. O'Connor has another most promising belladonna crop and hopes now to extend his medicinal plant growing activities to include digitalis, colchicum, peppermint,

henbane, chamomile, etc., in 1947. Eventually he hopes to expand the enterprise into a fully developed *materia medica* farm if practical help for the project is forthcoming from the Department of Agriculture in Dublin. From his experiments, Mr. O'Connor is convinced that the Irish climate and land are most suitable for medicinal plant growing, for which there is a considerable export business to be had if plants of high yields are produced.



Another part of the garden

Benadryl in Hay Fever.—Benadryl (β -dimethylaminoethyl benzhydryl ether), a new antihistamine compound synthesised by Rieveschl and Huber in the research laboratories of Parke Davis & Co., is described by Harley ("The Lancet", August 3, pp. 158-59) as constituting possibly "the greatest advance in the palliative treatment of allergic diseases since the discovery of the action of adrenaline". In skin-tests conducted on five hay fever patients a fourfold reduction in the area of skin reaction was observed after the first day's treatment with Benadryl (300 mgm.). After six days' treatment with 150 mgm. of the drug daily, the skin reactions had returned to about three-quarters of their original size. Of the five patients treated, three were promptly relieved of hay fever and remained so until twelve to twenty-four hours after cessation of treatment; one patient was "greatly improved"; and one patient was not benefited. Side effects noticed during the first day's treatment consisted of dryness of the mouth, slight drowsiness, etc., but these abated when the dose was reduced to 150 mgm. a day. Though the number of cases investigated was insufficient for accurate assessment, the writer suggests that Benadryl will probably abolish the need for pre-seasonal specific desensitisation in many hay fever patients.

BRITISH PHARMACEUTICAL CONFERENCE 1946

SCIENCE PAPER

(Continued from THE CHEMIST AND DRUGGIST, August 10, p. 181)

Of the remaining papers presented at the Science Sessions of the Pharmaceutical Conference, that read by Professor Brindle is reviewed below.

Preparation of Non-Pyrogenic Water and Infusion Fluids, using Activated Charcoal

By HARRY BRINDLE and GERALD RIGBY

[ABSTRACT]

PYROGEN is a thermostable product of the metabolism of certain strains of bacteria. The entrainment of these bacteria in the distillate from ordinary water still leads to their development and the production of pyrogenic matter in the distilled water if it is allowed to stand for any period greater than twenty-four hours without being sterilised. Even when such water is sterilised immediately, it may contain sufficient pyrogen to give a reaction. Such samples of water, on intravenous injection, give rise to a febrile condition including a sharp rise in body temperature and a marked fall in the white cell count. Both responses have been used as the basis of tests for pyrogen in infusion fluids.

Use of Charcoal

The sample of charcoal used was supplied by the manufacturers as "Depyrogenising Charcoal." The water under test was shaken at frequent intervals for fifteen minutes with 0.1 per cent. of this charcoal and filtered through a sintered glass filter No. 2C.3. A table gives the results obtained using the public supply of a large town and from a Cheshire stream after distillation. In each case, the water was injected as dextrose saline. The Cheshire stream from which the water was obtained was strongly polluted and would never be used as a town's water supply. The results indicate that, even with unsatisfactory water, 0.1 per cent. of charcoal will remove the pyrogen present in the ordinary distilled sample. As bacterial growth progresses in unsterilised samples the pyrogen formed may be more than can be removed by 0.1 per cent. Grossly contaminated samples of water may not be completely depyrogenised by 0.1 per cent. of charcoal. It is not considered probable, however, that

such samples would be used for the preparation of solutions for injection. Only one sample of "raw" tap water and samples of pyrogen H containing unsterilised distilled water which had been stored for some weeks required more than 0.1 per cent. of charcoal to remove the pyrogen. None of the following methods was found to be of value as a means of depyrogenising water:—

(a) The action of 30 parts per million of chlorine—subsequently removed; (b) percolation through a sample of granular charcoal; (c) using 100 mils volume in each case, prolonged autoclaving, e.g. sixty minutes per 100 mils at 10 lb. per sq. in. pressure; (d) autoclaving at 15 lb. per sq. in. pressure—for thirty minutes per 100 mils; (e) filtration through a Doulton or ordinary Seitz asbestos bacteria-proof pad.

Preliminary Test

As a preliminary test on pyrogenic drugs, sterilised solutions of non-pyrogenic dextrose and sodium chloride in pyrogenic distilled water were injected. Parallel tests were carried out after treating some of the same solutions with 0.1 per cent. of charcoal. The untreated solutions caused an average temperature rise of 1.51° C., and the charcoal-treated solutions caused an average temperature rise of 0.14° C. only. After standing for six months in a bottle on the laboratory bench, the pyrogenic activity of the drugs was found to have decreased and eventually the samples passed the test. Many drugs commonly used for injection, sometimes in large doses, such as glucose and sodium citrate, contain pyrogen. The contamination may occur in consequence of the use of pyrogenic water at some stage of the manufacturing process. Eventually it might be possible to demand that such drugs be supplied pyrogen-free. In the meantime, solutions for injection in doses of perhaps 10 mils or more should be treated with suitable charcoal to ensure absence of pyrogen. No other practicable method of depyrogenising such solutions is available at present. To determine the loss of active substance from the charcoal treatment, the effect of 0.1 per cent. of charcoal upon 0.9 per cent. sodium chloride solution and upon the same strength of sodium chloride in the presence of 5 per cent. of glucose was

studied. The concentration of sodium chloride was reduced only to 0.887 per cent. in the presence of 5 per cent. of glucose the loss was even less. Similar experiments were carried out on solutions of procaine hydrochloride. The results indicate a definite loss of active ingredients which becomes serious in strengths below 0.5 per cent.

Solutions Allowed to Stand

No effects followed if pyrogenic glucose saline was treated with 0.1 per cent. of charcoal and allowed to stand in containers sealed with rubber caps for eighteen to twenty hours before sterilisation. In the single case of a solution of dextrose and sodium chloride in pyrogenic distilled water, which had been depyrogenised with 0.1 per cent. of charcoal and allowed to stand for thirty-six hours before sterilisation, an average rise in temperature of 1.83° C. was obtained. In no case was a positive reaction obtained if the interval between adequate charcoal treatment and sterilisation was less than twelve hours. (From the departments of pharmacy and pharmacology, Manchester University.)

DISCUSSION

MR. B. A. BULL, from the chair, said that, should a process of removing pyrogens be found that was so simple that only shaking and filtering was needed, it would be invaluable. Professor Brindle had modestly refrained from mentioning the difficulties he had encountered in securing a suitable charcoal, in order to obtain which, he had had to draw up his own specifications.

MR. ALLPORT, London, said that, in removing pyrogen, a prime consideration was that the water should not be altered. With all the charcoals that had been available to him, the water had been rendered acid. He had tried neutralising tribasic sodium phosphate, but the resulting charcoals failed to remove pyrogen. On the phenomenon observed by the authors that solutions tested lost their pyrogen on storage, he said his own observations on two different solutions were that one was pyrogen-free after two months, while the other was still pyrogenic after eight months.

DR. MITCHELL, London, asked whether an inappropriate charcoal might not actually contribute pyrogen to the water.

MR. F. H. OLIVER asked if Professor Brindle had tried using smaller quantities of activated charcoal than 0.1 per cent. and whether there was any strong evidence of

pyrogen being a polysaccharide; a group of proteins was known which contained a carbohydrate group.

MR. POWELL, Nottingham, asked what was known of the action of charcoal on procaine hydrochloride, for there was an appreciable absorption of alkaloid from solutions of certain alkaloidal salts.

MR. K. BULLOCK, Manchester, inquired whether there was never a fall in temperature, and whether there was any sign of the hydrolysis of procaine.

PROFESSOR H. BERRY, London, said that, early in the war, he had had considerable experience of activated charcoal in the preparation of dextrose salines prior to the inauguration of a blood-transfusion service. The municipal water supply was found highly pyrogenic. The charcoal method was undoubtedly effective, but one of the difficulties was the removing of colloidal carbon on filtration. Filter paper was found unsuccessful, and even candle filtration was not effective. A committee dealing with the problem had found no evidence that commercial dextrose was pyrogenic. If concordant results of pyrogen tests were to be secured, a standard pyrogen was needed, and it was also necessary to correlate the pyrogen effects on rabbits and on man.

MR. T. D. WHITTET, London, asked whether it was the intention of the authors that activated charcoal should be used where a still delivering pyrogen-free water had been employed.

DR. H. DAVIS, London, asked whether the filtrate solution had been examined for deposit after several days, and whether pyrogens could not be absorbed by a bacteriological filter, and MR. LEES, Barnard Castle, if the value of pyrogen-removing pads had been examined.

PROFESSOR BRINDLE, replying to the various points raised, said that Seitz pads had been tried, but removal of pyrogens was really a matter of quantity. When pyrogens were present in small amounts, both the pads and bacterial filters were capable of removing them. He had found only one manufacturer prepared to make the correct charcoal. In the preparation of an activated charcoal for removing pyrogen, the steam method was necessary, the product being treated with dilute hydrochloric acid and washed subsequently until neutral. In the test animals there had been an occasional fall in temperature, but the average had always been a rise or no change. Some work had been done by Co Tui on the correlation of effects on rabbits and humans and his figures bore the relationship 0.016 and 0.037.

BRITISH PHARMACEUTICAL CONFERENCE 194

IDENTITY OF SOME PLANT DRUGS

Abstracts of and discussions on three pharmacognostical studies presented at one of the Science Sessions of the Conference

THOUGH not in any way directly related to one another, three papers concerned with pharmacy may be grouped for convenience. The first was:—

The Determination of Adulterants in Drugs Consisting of Leaves

[ABSTRACT]

By J. L. FORSDIKE

When drugs consisting mainly of leaves occur adulterated with foreign leaves, they are often broken into comparatively small pieces. Usually it is possible, by examination of the material in a good light, to perceive distinct differences between the pieces of leaves present and to pick out all the adulterant by the use of a small forceps. To make the method generally useful and to facilitate its application, one needs to determine precisely those characters of the leaves which give the particular appearance. The principle differences observable in closely similar leaves appear to be connected with the surface condition and texture, and the shape and visibility of the vein-islets. Of these characters, the vein-islets appear to be more important in practice, because leaves with notably different surface appearances, or of notably different texture, would not be admixed by a skilful manipulator and would not be likely to deceive a collector, who might collect them inadvertently. Leaves may also differ in colour, but the colours of dried leaves depend to a great extent upon the conditions prevailing during collecting and drying, and no consistent conclusions can be based on this feature.

Illustrations showed the appearances observed in some of these leaves, and a method of separating adulterants from broken leaves by examination of the venation was described. The following points were useful for distinguishing between broken leaves in special cases: (a) Flatness of the pieces (e.g. *Ailanthus* from belladonna leaves), (b) colour (e.g. *Phytolacca* leaves from belladonna), (c) hairiness of the surface (e.g. Henbane from stramonium, dandelion, etc.).

DISCUSSION

DR. T. E. WALLIS made the point that the methods described by MR. FORSDIKE could be applied directly to the determination of leaves in mixtures of leaves.

DR. FAIRBAIRN suggested that the spiral markings of the trichomes might be caused by the action of chloral hydrate.

MR. FORSDIKE agreed that the method of determining adulterants had a wider application than his title suggested.

Ipecacuanha—Differential Histological Characters for Commercial Varieties

By COLIN MELVILLE

[ABSTRACT]

The investigation was undertaken with the object of comparing the histology of the several commercial varieties and establishing criteria for their differentiation. Starch grain diameter differences exist in the xylem elements, and the number of cork cells per unit area has been examined. The materials examined consisted of thirty samples of the commercial drug and the powders ground therefrom. Each sample conformed in its general appearance with the U.S.P. XII description. The range of starch-grain diameter for Cartagena and Nicaragua material (*C. acuminata*) was 15.45 to 21.31, and quite distinct from the range of 7.53 to 10.68 for the Rio, Minas Bahia and Manaos material (*C. Ipecacuanha*). For three samples of Johore material, the range was 3.10 to 4.59. The ranges of the roots means of cork cells based on ten counts of areas of 0.025 sq. mm. were Rio 32.6 to 39.4, Cartagena 21.9 to 29.6. These results indicated that the number of cork cells per sq. mm. should be calculated from counts on areas of at least 0.25 sq. mm. The results for commercial powders were: Rio material, 1360 to 1417; Manaos sample, 1420. For the Minas, Cartagena, Nicaragua, Bahia and Johore material the range was 932 to 1077. Estimates of the mean starch-grain diameter and the range obtained by direct measurement on commercial powders indicated that Cartagena ipecacuanha and Nicaragua ipecacuanha may be distinguished from the other varieties by this character. The author suggests that the Pharmacopœial requirements of a maximum starch-grain diameter of 15 μ for the official drug (*C. Ipecacuanha*) is insufficient to exclude entirely the drug obtained from *C. acuminata*. (From the

departments of botany and pharmacy, University of Manchester: the work was done at the request of the British Pharmacopœia Commission.)

DISCUSSION

MR. NEAVE, Nottingham, suggested that 10μ starch grain index might be more diagnostic and also pointed out that two values had been given for the number of cork cells per given area of Cartagena root.

MR. WALLIS asked if difficulties had been experienced in counting the number of individual starch grains in compound grains, and also in counting the number of grains enclosed in wood parenchyma. In reply, MR. MELVILLE said that 9μ starch grain size rather than 10μ had been chosen as it gave more convenient numbers for counting. Possibly two varieties of Cartagena pecuanha existed, which would explain the two values given for cork cells, and investigations into this matter were being conducted by other authorities. Compound starch grains were easily broken down into individuals for counting purposes.

Indian Squill and its Differentiation from European Squill

By J. L. FORSDIKE AND H. O. MEEK.

[ABSTRACT]

The macroscopical and microscopical characters of Indian squill, and the differences between these and the characters of European squill are described in detail. Illustrations and structures of the Indian variety are given as follows:—

1. Numerous polyhedral to subspherical parenchymatous cells, 100 to 250μ in diameter, containing mucilage, which stains red with alkaline solution of corallin and reddish-purple with iodine water.
2. Acicular raphides of calcium oxalate, 20 to 900μ (usually 50 to 500μ) long, and 1 to 15μ (usually 2 to 8μ) wide.
3. Epidermis of tetragonal to hexagonal, thin-walled cells averaging 3 to 5 times as long as they are broad, some cells exceeding 180μ long, but not more than about 10 per cent. exceeding 45μ in breadth.
4. Stomata rare, circular in outline, 40 to 42μ in diameter; usually surrounded by four epidermal cells.
5. Cuticle 4 to 6μ thick, appearing stratified when seen in transverse section; sometimes showing faint transverse parallel cuticular striations in surface view.
6. Annular and spiral vessels, 14 to 70μ in diameter, with lignified walls.
7. Sieve tubes with slightly curved

transverse walls, occupied by a sieve plate covered by callus which stains red with alkaline solution of corallin.

8. Starch absent.

9. Mounted in Fehling's solution on a slide and warmed gives orange precipitate.

10. Responds to the tests described for presence of mucilage insoluble in alcohol; for a colour reaction with iodine; and for a colour reaction with α -naphthol on a 60 per cent. alcohol extractive.

11. Yields about 1 per cent. of fatty matter on extraction with ether; the extract having a pale-blue fluorescence under ultraviolet light.

12. The amount of water-soluble extractive is from two to two-and-a-half times the (60 per cent.) alcohol-soluble extractive.

DISCUSSION

DR. FAIRBAIRN pointed out that authors' observation of mucilage in all cells of Indian squill was at variance with the description in the British Pharmacopœia, and asked if staining the mucilage with ruthenium red had been found useful in distinguishing between the two varieties.

MR. C. MELVILLE suggested that valuable information to other workers would have been given by stating the number of specimens on which the tests had been done. He asked whether the diameter of the vessels could be used as a diagnostic feature. The number of cells per unit area of epidermis might be diagnostic.

MR. POWELL suggested that no fundamental difference in the activity of the two varieties had been observed.

DR. WALLIS mentioned that two varieties of the Indian drug had been recorded and asked if any variation had been observed in the cells containing mucilage.

MR. G. R. PAGE stated that while Indian squill had been found to be actually less bitter, galenicals prepared from this were more bitter than those from the European.

In reply MR. FORSDIKE stated that variation in the mucilage content of the cells had been noted and was thought to be due possibly to the breaking of the cells. Ruthenium red had produced no useful evidence. The epidermal cells were not counted, as sufficient evidence had already been collected. The number of cells per unit area might be diagnostic but it was not thought that the diameter of vessels was significant. A further paper on the two Indian varieties might be forthcoming. Bitterness of galenicals made from Portuguese varieties had been experienced, but not in those prepared from the Indian drug.

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VOL. CXLVI AUGUST 17, 1946 NO. 3471

London Insurance Dispensing Figures

In making any comparison of prescription figures for 1945 with those for previous years it should be noted that one sixth addition was made to all dispensing fees shown in the Drug Tariff for the years prior to 1945 and that an extra sixth, making one third in all, was added for the year 1945. This does not affect the total or average ingredient costs which are liable to fluctuation from time to time and which, in the period in question, have shown a slight general increase. The increase of one-sixth for 1945 (allowed by the Ministry of Health) refers only to average cost of dispensing fees (as compared with the year 1944, when the original one-sixth increase allowed by the Ministry was in operation). Both increases have, of course, been reflected in the higher average total cost of the whole prescription.

In the table showing a comparison of costs for London insurance prescriptions for the years 1944 and 1945 there is an increase in 1945 of 135,000 prescriptions and an increase in ingredient cost of £13,500. Each 1945 prescription cost 0.4 pence more for ingredients than the 1944 prescriptions, due to a rise in drug prices. The increase of £20,000 in dispensing fees for 1945 is almost wholly due to the extra one-sixth allowance for that year.

The number and cost of the prescriptions dispensed by chemists for the year 1945 in the area of the London Insurance Committee are shown in the following table. The

figures for 1944 are included for the purpose of comparison.

Item	1945	1944
Total prescriptions	5,924,987	5,789,746
Cost of ingredients	£166,441	£152,960
Cost of dispensing fees ...	£147,316†	£126,564*
Total cost of prescriptions ...	£313,758	£279,524
Average cost of ingredients (in pence)	6.74	6.34
Average cost of dispensing fees (in pence) ...	5.97	5.25
Average cost per prescription (in pence) ...	12.71	11.59
Mean number of persons on lists	1,350,491	1,368,536
Average number of prescriptions per person ...	4.39	4.23
Average cost per person (in pence)	55.76	49.00

*including one-sixth addition.

† including one-third addition for the whole year.

During the thirty-three years 1913 to 1945 inclusive, the London Insurance Committee has been responsible for pricing 227,434,533 prescriptions, at a total value of £7,915,886. The yearly average number of prescriptions priced during the thirty-three year period was 6,891,955.5, giving a weekly clearance of 132,538 prescriptions.

An International Pharmacopœia?

The project of an International Pharmacopœia commends itself to consideration in Britain particularly at present when there is a need for replacing the 1932 British Pharmacopœia and Addenda. The success with which the newly formed World Health Organisation has met, initially at least (C. & D., August 3, p. 130), portends favourably, perhaps, for such an international development, and pharmacists

and others, who have already thought or worked along these lines will welcome the recent publication of the interim report of the Technical Commission of Pharmacopœia Experts of the League of Nations on the Unification of Pharmacopœias (see p. 202) as timely. Dr. C. H. Hampshire, in a historical review of the work of the Commission, points out the need for a uniform standard of nomenclature, so that the same name should designate a drug of the same strength and composition in all countries.

Nomenclature and Dosage

Confusion over nomenclature and dosage is a potential danger to the health and lives of travellers, and is a hindrance to the spread of medical and pharmaceutical knowledge; further, differences in standards may lead to retention of lower standards of manufacture. Since the first attempts at forming an International Pharmacopœia in the latter part of the past

century considerable progress at unification of standards has been made, notably the second International Agreement completed in 1929, which dealt with the biological testing of arsenobenzenes, nomenclature and maximum doses. In the suggested table of posology given in the present interim report a statement of the usual doses, in addition to the maximum single and daily doses, is worthy of note. The form of the suggested Pharmacopœial monographs is simple and concise, and the layout given is commendably clear.

Future work will inevitably include international standardisation of sulphonamides, synthetic anti-malarials, penicillin and streptomycin, and in this respect the work of the League's Health Organisation in defining an international unit of penicillin (see p. 194) is significant.

The international aspect of pharmacy has now been well established and it is increasing considerably its scope and importance.

SWINE FEVER VACCINE

TESTS on the degree of immunity imparted to pigs by a vaccine prepared from the blood of infected animals, with the addition of gentian violet, carried out at the Weybridge veterinary laboratory of the Ministry of Agriculture, are described in a bulletin recently issued by the Ministry. No significant difference was found in the immunity induced when pigs born from vaccinated sows are themselves vaccinated at about three weeks old and still suckling or when about ten weeks old, i.e. after having been weaned. In tests to ascertain the behaviour of the vaccine in breeding-rearing herds under varied conditions of diet and hygiene 2,503 pigs in twenty-four herds had been used.

Details of Tests

From the vaccinated groups 264 pigs were tested for immunity at intervals varying from three to nine months: sixty-nine had been vaccinated before weaning and 195 after weaning. Taking all the tested pigs, irrespective of the interval between vaccination and testing for immunity, 88.6 per cent. were found to be immune (76.8 per cent. of pigs vaccinated before, as against 92.8 per cent. after weaning). From the experiment it was concluded that vaccinated pigs develop a satisfactory degree of immunity

whether vaccination is carried out before or after weaning, but that there is a tendency for the immunity to wane sooner in pigs vaccinated before weaning. To show whether vaccinated pigs will withstand exposure to natural infection of swine fever, six groups of vaccinated and un-vaccinated pigs were subjected to exposure to infection in six different outbreaks of swine fever in different parts of the country.

Strength of English Strains

In no case did a vaccinated pig become sick; many of the unvaccinated pigs died—all became sick. Including these tests pigs immunised with crystal violet vaccine have now been exposed to thirty-one English strains of swine fever virus in the naturally occurring disease: the vaccine has afforded protection against all of them. From this experiment evidence was also obtained of the variability in virulence of different English strains of swine fever virus. Tests carried out to show the duration of immunity conferred by crystal-violet vaccine immunity following vaccination were effective for about twelve months. English strains of swine fever virus were found to differ in their virulence, but on the whole were shown to be less virulent than the American strain used in producing the vaccine.

AFTER TWO CENTURIES

by Adest

AMONG the new books listed in "The Gentleman's Magazine" for July 1746 was a *Pharmacopœia Londinensis*, published at 7s. "sew'd." As that magazine went to press near the end of the month, we may infer that the book was put on sale between the last week of June and the last week of July 1746. If I were asked to sum up in a few words its main interest for a present-day reader, I should be inclined to reply, "The turn of the tide." The contents of its predecessor of 1721 remind us almost too faithfully of those of the first *London Pharmacopœia* (1618): the contents of its successor of 1788 have a distinctly modern appearance. The volume forming the subject of this article marks the transition from the one kind of book to the other.

Committee on 1746 *Pharmacopœia*

Preparation of the 1746 P.L. began in October 1738, when a committee consisting of the president (Dr. Henry Plumptre), censors and other members of the London College of Physicians was constituted for the purpose. Drafts of new or revised formulas were circulated at intervals, the final decision in each case being made by the College. Henry Pemberton, F.R.S., Professor of Physic in Gresham College, was ready with translation of and commentary on the *Dispensatory*, as it was sometimes called, about the time of its appearance; and for his assistance in the work of compilation he was presented by the College with the copyright, 100 guineas and a sum towards his expenses. His translation is of more than ordinary value because of his long—and, it must be added, somewhat discursive—account of the committee's deliberations.

The Latin preface to the *Pharmacopœia* gives an indication of what the revisers attempted, and of the balance struck between principle and expediency. Pemberton's translation of the passage reads as follows:

"It were certainly a disgrace, and just reproach, if pharmacy should any longer abound with those inartificial and irregular mixtures, which the ignorance of the first ages introduced, and the perpetual fear and jealousies of poisons enforced . . . the simplicity of physic was lost, and a wantonness in mixing, inlarging, and accumulating took place; which

has continued even to our times. We have here endeavoured, as much as might be, to retrench this excess; though in some things we have submitted to the prevalence of custom, and have left them to the correction of posterity."

"Heaps of Drugs"

Two notorious examples of polypharmacy, *mithridatium* and *theriaca Andromachi*, retained in the P.L. of 1746 with a slight reduction in the "heaps of drugs," have been so frequently publicised that a mere mention of them here is almost sufficient. In view of his close connexion with the College, Pemberton could not well associate himself with Heberden's devastating criticism in "Antitheriaca," a pamphlet issued in 1745. He permitted himself, however, a comment on the "insignificant quantities" of some of the substances in these medicaments. In a total weight of 300 drachms there were, he said, three ingredients of only 10 grains (? each), and the raisin pulp ordered was less than a drachm and a half: some of the constituents, in fact, yielded a small fraction of one grain in an ordinary dose. This remark from a man so versed in the details of the revision was in effect an adverse judgment on the two formulas and, by implication, on the College responsible for them.

Drastic Reductions

But there are many instances of a bolder policy prevailing. Over and over again we find the compilers making a drastic reduction in the number of items in a formula. To begin with, the *materia medica* has come down to 272 articles, whereas the 1618 P.L. contained 1,028; preparations and compounds show a decrease from 932 to 378. From the raw materials of the 1721 P.L. the following, among others, have been banished: Apes, cranium hominis, dens apri, lumbrici terrestres, mummia, scorpiones terrestres, usnea crani humani. Millipedes, vipers and bellies of skinks remain. Vipers occasioned a disagreement between the committee and the College. The draft formula recommended that wine of vipers be prepared with the active ingredient "living and intire"; the College overruled this idea, and retained the dried reptile then official, on the ground that the process took less time than was needed with the living vipers.

Careful Study

The treatment of a few traditional formulas illustrates the general policy of the College, and especially its desire to improve them in the light of available knowledge. *Spiritus volatilis aromaticus* (formerly *spiritus salis volatilis oleosus*) is directed to be made by distillation from a mixture containing the essential oils of lemon, nutmeg and clove, whereas in 1721 the ingredients for the still were cinnamon bark, mace, cloves, lemon peel, sal ammoniac and salt of tartar, with spirit of wine. The *confectio Raleighana* of 1721 (renamed *confectio cardiaca*) has lost forty of its fifty-one ingredients. (A history of this medicine was printed in *THE CHEMIST AND DRUGGIST*, 1924.II. 256.) Pemberton notes that for this reduction the committee exercised great care, studying a formula "transcribed by Mr.

Boyle from a book in the possession of the author's son. . . . It should be observed," he adds, "that this medicine was contrived near the time, when spirituous extracts were first brought in fashion by the chemists, and were usually compounded with little judgment, being praised without distinction. . . ." Another formula with an aristocratic pedigree, the Earl of Warwick's powder, was left unchanged by the committee but was commended to the scrutiny of the College, who overhauled it with such effect that, as *pulvis e scammonio compositus*, it contained only scammony and prepared hartshorn; its predecessor included diaphoretic antimony and tartar. A now obsolete substance, bezoar stone, was deleted from *pulvis e chelis cancrorum compositus* and transferred to another powder because, it was alleged, the bezoar, "being a costly material, is for the most part clandestinely left out of this medicine

upon supposition, that physicians do not in every case, where this powder is prescribed, depend in any particular manner upon this express ingredient. . . ." It may be remembered that Frederick Slare and Joseph Browne had shown, some years earlier, that bezoar was therapeutically inert.

SYRUP. 101

SIMILITER conficiuntur syrapi e succis Mororum, et Fructis rubi Idæi.

SYRUPUS e MECONIO,

five

DIACODION.

Et Capitum papaveris albi siccatorum, seminibus exceptis, r. libras tres cum dimidiâ, Aque congiis sex.

CAPITA concide, et in aquâ coque, subinde peragitan, ne urantur, donec tertia circiter pars liquoris remaneat, que tota ferè a capitulo imbibetur; deinde remove ab igne, et fortiter exprime; postea coquendo redigè ad quatuor circiter libarum mensuram, et, dum adhuc feruet, colla, primùm per etribum, deinde per pannum lancium tenue, et seponere noctem, ut facies subfundat: manè purum liquorem effusum coque cum pondere faeculari purissimi libarum sex, donec pondus rotius sit libarum novem, vel paulò plus, ut fiat syrups idonea spissitudinis.

SYRUPUS PAPAVERIS ERRATICI

Et Florum papaveris erratici recentium r. libras quatuor,

Aque bullentis m. libras quatuor cum semis.

AQUA

Page (reduced) from P.L. 1746

A Rejection

The most amusing discovery for the reader of Pemberton's narrative is, I think, that a proposal to adopt the pill of Richard Mathew (an account of which was given in *THE CHEMIST AND DRUGGIST*, 1927.I. 831) had been seriously discussed. The proposal was rejected; for the committee we learn,

"cannot upon the maturest deliberation think the *pilulæ Mathæi* by any means worthy a place in this book, either in regard to the author, in the composition itself. The author,

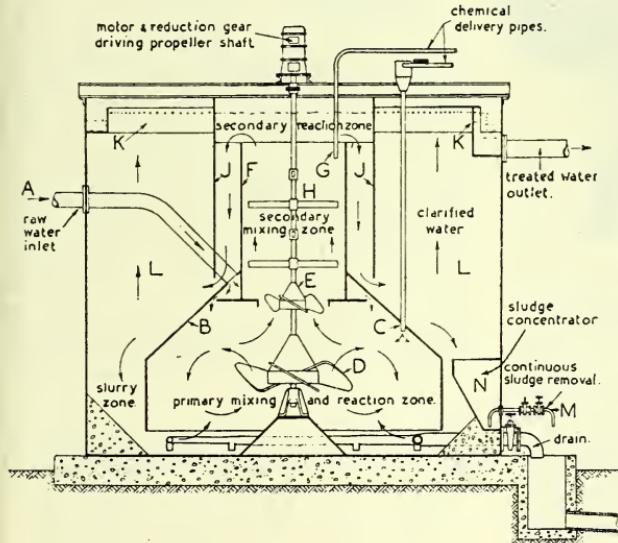
Starkey, was a boasting quack pretending to the possession of *Van Helmont's* whimsies, the alkahest, horizontal gold, and other like chimeras . . . Very tedious and pompous processes have been given for making it, with numerous cautions, which in reality are no better than so many endeavours to prevent success."

Of the new preparations it must suffice to mention *pilulæ mercuriales*, consisting of mercury 3v, Strasbourg turpentine 3ij, cathartic extract 3iv, powdered rhubarb 3j. The account of the work of the College committee states that syrups and distilled waters were formerly used as "the great alteratives", hence the large number of them. We learn that the massing of *pilula rufi* with syrup of wormwood was "prejudicial to the colour, which is the marketable recommendation." This *Pharmacopœia* is printed in large type with wide margins.

NEW WATER SOFTENER

A NEW lime and soda ash water softening plant, known as the "Accelerator," speeds the coagulation of calcium carbonate and magnesium hydrate by mixing thoroughly the already precipitated sludge with the softening reagent, resulting in an increased seeding effect from the sludge. The mixing is done mechanically by a motor-driven agitator. The plant consists of a vertical and relatively wide main outer steel plate cylinder containing inner reaction portions also of steel plate. The raw water enters by an inlet pipe at the side of the main cylinder and passes the "agitator hood," a wide diameter circular closed chamber in the lower half of the main cylinder fitted with a hood. The upper portion or extension of the hood is a vertical jacketed

flue. The whole volume of water travels up from the agitator hood through the secondary zone and flows over at the top, and down through an outer jacket into the body of water in the main cylinder, the lower half of which forms the sludge settlement zone. Pure clarified water passes out continuously from the top of the plant and about half-way up the plant there is a distinct difference in the appearance of the water, due to the very effective gravity deposition of the sludge, which is in large particles. The sludge is removed continuously from the bottom of the plant by a "concentrator discharge trough," the inlet to which is about one-third of the height of the main cylinder. Thus only the finer and lighter portions of the sludge, which



Vertical section of the "Accelerator" water softening plant.

- A. Raw water inlet
- B. Agitator hood
- C. Reagent entry point
- D. Paddle agitator
- E. Circulating propeller
- F. Centre tube
- G. Coagulant pipe
- H. Bar agitator and baffles
- J. Outer downcomer pipe
- K. Clear water discharge
- L. Level between sludge level and clear water

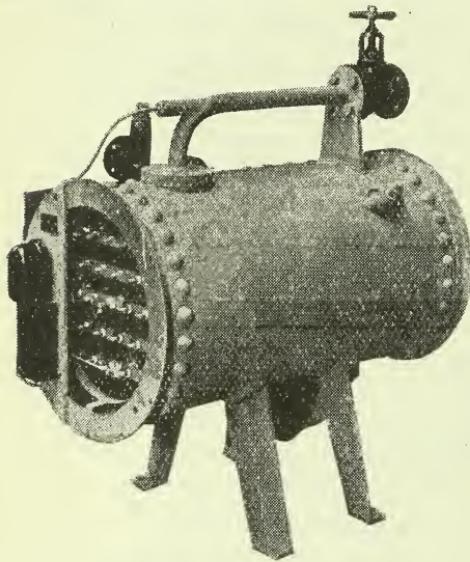
cylinder of smaller diameter, reaching almost to the top of the main cylinder, and is known as the secondary mixing zone. Through the centre of this is a vertical shaft driven through a reduction gear by a small electric motor at the top, forming a vertical paddle shaft. This shaft extends down to the bottom of the agitator hood. The agitation process gives instantaneous and intimate mixing of the raw water with the reagents, and with the slurry, which is forced up into the upper secondary mixing zone by the action of the propeller agitators immediately below. At the top of the secondary mixing zone, also, coagulant solution (alum) is added continuously, where a gentle agitation is given by bar or paddle agitators operating in conjunction with baf-

flues. The whole volume of water travels up from the agitator hood through the secondary zone and flows over at the top, and down through an outer jacket into the body of water in the main cylinder, the lower half of which forms the sludge settlement zone. Pure clarified water passes out continuously from the top of the plant and about half-way up the plant there is a distinct difference in the appearance of the water, due to the very effective gravity deposition of the sludge, which is in large particles. The sludge is removed continuously from the bottom of the plant by a "concentrator discharge trough," the inlet to which is about one-third of the height of the main cylinder. Thus only the finer and lighter portions of the sludge, which

alkalinity tests. The makers of the plant are the Paterson Engineering Co., Ltd., Windsor House, Kingsway, London, W.C.2.

Electric Superheating

Electrically produced superheated steam as a heating medium for installations up to



Electric superheater showing the terminal cover partially removed

about 1,000 to 2,000 Kw. has a wide field of application and is said to be no more costly to operate than other forms of heating if the price of electricity is 0.50-0.90d. per unit. Absence of labour, a high thermal efficiency, small size and weight per unit output, ease of starting or shutting down; safety; and accurate automatic regulation of the temperature of superheat are among advantages of this method. To calculate operating costs, the thermal efficiency may be taken as 95 per cent.

A Typical Apparatus

What may be taken as a typical superheating installation by Bastian & Allen, Ltd., 118 Bedford Square, London, W.C.1, is rated at 16 Kw. for 346 volt 3-phase 50-cycles, and supplies superheated steam at 200 lb. per sq. in. to a temperature of 500°F., the maximum capacity being 450 lb. of steam per hour. The superheater consists of a horizontal steel cylinder containing eighteen horizontal electric resistance heating coils, each of which is contained in a small diameter steel tube fixed horizontally throughout the length of the casing in five

rows, one above the other and connected to a terminal cover at one end of the casing. The steam entering the casing, is superheated by contact with the highly heated steel tubes. Automatic thermostatic control maintains the temperature of the steam at a predetermined figure (usually 500°F.).

INSURANCE ACT DISPENSING

Blackpool.—At a recent meeting of the Insurance Committee, Mr. D. J. Bailey, J.P., M.P.S., (chairman), reported that the matter of the shortage of liquid paraffin in Blackpool had been taken up with local Members of Parliament, but that difficulty in dispensing prescriptions for this would continue until supplies became more readily available.

Denbighshire.—Application for permission to introduce a rota system for after-hours dispensing was heard at a meeting of the Insurance Committee at Wrexham recently. Mr. J. Roberts, M.P.S. stated that the matter arose from staff difficulties. The Committee pointed out, however, that surgeries in Denbigh remained open until 7.30 or 8 p.m., and that a fresh contract with chemists would have to be entered into before the rota system could be introduced.

Cornwall.—An increase of 17,996 in the total of contributors in the area on July 1, 1946 compared with the same date in the previous year was reported at a meeting of the Insurance Committee in Truro recently. A proposal by Mr. A. C. Cannon, M.P.S., that the names of insured persons on the dispensing list of a firm of doctors should be transferred to their non-dispensing list, was carried unanimously. It was pointed out that three chemists already gave a dispensing service in the town concerned.

Birmingham.—The annual report of the Pharmaceutical Committee recently published shows that while the total number of insurance prescriptions dispensed in Birmingham in 1945 (2,207,150) was 335,448 fewer than in 1938, the prescription cost (£116,405) had risen by £31,734 compared with the same year. The average prescription cost was 12.66d., compared with 11.34d. in 1944, and 7.90d. in 1938. The number of insured persons was 494,210, and the Committee's expenses, including cost of checking was 0.75 per cent. of the dispensing fees. Owing to staff difficulty, the Central Checking Bureau has had to reduce the number of prescriptions examined. The report mentions the resignation of Mr. J. W. Bland, after serving since 1931.

MISCELLANEOUS INQUIRIES

It should be noted that some of the replies included in these columns may have been prepared for overseas subscribers. Items listed in formulas are not necessarily available in Britain; their use may also be controlled or prohibited under Orders operative in the home territory.

Curing Rabbit Pelts. — *J.F.M.* — Of many methods of curing rabbit pelts, one of the two following will probably prove most suitable for your purpose:—

(1) Immerse the fresh skin in a strong solution of alum and salt until, when the skin is doubled twice, flesh-side outwards, and pressed firmly between fingers and thumbs so that the liquid is well pressed out, the skin in the crease looks white. Remove the skin from the liquor and immerse it for a short period in warm flour and water, then wash out the flour under a stream of water. When about half dry, lay the skin on a flat, smooth board and scrape off the flesh with a blunt-edged knife, or rub it off with pumice.

(2) Soak the fresh skins for three or four days in liquor prepared by boiling two quarts of water with a "good double-handful or more" of oak-bark, or preferably oak galls, for two to three hours in a suitable vessel.

After-shave Lotion. — *G.T.* — The following are representative formulas of this class of preparation:—

I			
Lactic acid	...	...	...
Water	...	...	1
Preservatives	...	...	q.s.
II			
Ti-tree oil	...	...	0.25
Eau de Cologne	...	...	10
Witch-hazel extract	...	...	10
Water	...	...	8
III			
Potash alum	...	...	10
Triple distilled rose-water	...	400	
Water	...	600	
Salicylic acid	...	...	1
Colour (pink)	...	...	q.s.

The alum used should be of B.P. quality, which may give a faint violet coloration, owing to the reaction between the salicylic acid and traces of iron salts. This does not affect the final pink colour of the solution. Cheap grades of alum, however, having a larger proportion of iron, sometimes produce a deep purple colour and are to be avoided.

NEW TOILET PREPARATIONS ORDER

THE Board of Trade have made a new Order, the Toilet Preparations (Consolidation) Order, 1946, which revokes and re-enacts in consolidated form the Toilet Preparations Nos. 3, 4, 5 and 6 Orders. The new Order makes the following changes:—

1. Registered manufacturers of toilet preparations will now be permitted to mark their goods with their brand names or trade marks, provided that these are included in the List to be kept with the new Toilet Preparations Register, which is being prepared. It is hoped to publish the new Register within the next few weeks, but until then manufacturers whose trade marks or brand names have been accepted for inclusion in the List should continue to mark their goods with their name and address as previously required, so as to avoid any confusion amongst their distributors.

2. Provision is made for the distribution of imported goods on the home market. Importers who have already been licensed by the Import Licensing Department to import toilet preparations should apply to the Assistant Secretary, Board of Trade, I.M.2B Division, Neville House, Page Street, London, S.W.1, for a licence under the new Order, so that their names can be included in the List of Licensed Importers which will be kept and published with the Toilet Preparations Register. Importers will also be required to label the goods with their name and address and the number of the licence issued to them under Article 5 of the Toilet Preparations (Consolidation) Order, 1946.

3. An omission in the previous Orders has been corrected to allow distributors to purchase and supply goods which have been packed by a licensed packer whose name appears on the List of Licensed Packers kept with the Toilet Preparations Register, although the goods may not have been packed by a registered manufacturer.

4. A new form of return, T.P./6, for goods manufactured and supplied by registered manufacturers, replaces form T.P./5. The new form will be used for the period which ended on June 30, 1946, and for subsequent periods. The form is being printed and will be sent at the earliest possible date to all registered persons, so that they can complete and return it before the date specified in Article 11 of the Order (September 30, 1946).

The new Order (S.R. & O. 1946, No. 1372) is obtainable, price threepence, from H.M. Stationery Office, Kingsway, London, W.C.2.

CORRESPONDENCE

Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor.

Custody of Dangerous Drugs

SIR.—The law compels me to keep certain drugs under lock and key, and sends an occasional policeman to see that the said key is kept in proper custody. Infringement of these regulations may lead to prosecution. Recently B.B.C. announcements have proclaimed that dangerous drugs have been lost or stolen. Loss or theft of dangerous drugs is almost invariably the result of carelessness. There does not appear to be any thought of prosecution of offending members of the public or doctors. It is surely a more serious matter for a doctor to leave drugs in an unattended car than it is for me to omit to lock my D.D.A. cupboard. In a fairly lengthy experience I have only once come across a case of the "locked cupboard" being the subject of an attempt at gaining illegal possession. I have known of many cases of doctors' bags being purloined, obviously in the hope of getting some narcotics. The majority of doctors are careful in these matters, just as the majority of pharmacists do their best to comply with the law, but I would ask why is it necessary to impose a penalty in one case and not the other? The remedy is simple. Impose a penalty on anyone, irrespective of profession, who is careless in the custody of "dangerous drugs."

Yours faithfully,
R. S. WHITELAW, M.P.S.

Anstruther.

Bacteria are No Respectors of Persons

SIR.—The discovery of penicillin and the immense possibilities of this new era of antibiotic medication which is now unfolding, has exploded on the pharmaceutical world like an atomic bomb. Pharmacists should recognise the advent of the antibiotics as a great chance to give the public a full pharmaceutical service in which their professional knowledge and training can be fully utilised. Unfortunately many retail pharmacists look upon this new material in awe and trepidation. They lack either (a) the knowledge of sterilisation and aseptic technique necessary to handle it, or (b) the desire to modernise their dispensaries and spend a large sum of money on the essential apparatus for sterile work. Both these defects are due in no small measure to the economic situation which has developed over the years in retail pharmacy. Owing

to the tragic underpayment of their services under N.H.I. and the ruthless competition of the "Librarians," they have developed a "complex" of keeping body and soul together, and their dispensaries have been pushed into the background. Now retail pharmacy is at the cross-roads. A few brave souls have set off on the path marked "progress" and have satisfied the stringent requirements of the Therapeutic Substances Act licensing authorities. How many more will follow? The T.S.A. requirements are necessary for the safeguarding of the public. But now we come up against a state of affairs which appears to be shrouded in secrecy. Why are hospitals and medical practitioners not subject to the requirements of the T.S.A.? It would be most interesting to know how many hospital dispensaries in the country would obtain a T.S.A. Licence for the preparation of penicillin injections if they were subject to inspection. Also the "aseptic" technique of the "G.P.," when he prepares his own injections from the dry penicillin salt, must be most illuminating. The public should most certainly be safeguarded, but let us have uniformity and no discriminations. After all bacteria are no respectors of persons be they even hospital pharmacists or general practitioners.

Ripley, Surrey. J. B. ELLARD, M.P.S.

"Craft" Union in Pharmacy

SIR.—I regret that owing to holiday absence I was prevented from acknowledging, or accepting, Dr. Clitheroe's recent invitation to Branch secretaries to discuss the advisability and possibility of further unifying the Society's members in an economic and professional sense. It may interest members to know that on Tees-side we took a referendum of our members on this issue and 90 per cent. favoured such a union as is now proposed. I am confident that, given the opportunity to vote on this question, other Branches would come to a like decision. Members of professions regard professionalism with its discipline emanating from the rank and file as advanced or educated trade unionism, and for that reason are reluctant to join the trade-union movement with its dictation from "the top." In this respect pharmacy is no exception. It must be now quite clear to the well-meaning and sincere exponents of trade unionism for pharmacists that there is little enthusiasm or support for any one

existing unions. Witness the fact that despite efforts to increase and enrol pharmacists in the various trade unions we are faced with the fact that only 8 per cent. of employee pharmacists are trade union members. Like medical, dental, nursing, midwifery, and surgical practitioners, the pharmacist is a vital factor in the health army of the country, and in the new health scheme this will become increasingly more evident. Because of this, the pharmacist, like any other professional man, must in future regard the time, money and study spent in securing his registration as capital invested, and his remuneration and status

must in the first place be regarded from this angle if we wish to secure satisfactory recruits to our ranks, and retain the respect and support of other professional, scientific and educational bodies. In Dr. Clitherow we have found a champion. We are grateful that he has given such a grand lead to all pharmacists throughout the country, and I do sincerely hope that every employee pharmacist will now, in his own way, do his or her utmost to throw a little endeavour into the new organisation whose only fault is that it is long belated.

R. MACDONALD MURRAY.

Middlesbrough.

BIOCHEMICAL ANALYSIS AND THE PHARMACIST

THE idea of the pharmacist being able to aid the doctor in his diagnosis, by carrying out biochemical analysis, is laudable, and one for which the pharmacist's training ably prepares him. To what extent, therefore, and under what conditions can the average pharmacist help the doctor thus without going to the expense of buying a lot of apparatus, or having to undergo an extensive training? The personal relationship between the pharmacist and doctor is important in this matter, for this type of work can only be built up slowly, the pharmacist gradually discovering the extent to which his knowledge and training will allow him to help the doctor, and the doctor the type of work which he can reasonably send to the pharmacist. The pharmacist who decides to build up a practice of this kind will be surprised at the results he can obtain and the amount of work he will be prepared to attempt after he has gained experience, and the confidence of the doctor. The nearness of the pharmacy to the surgery will prove to be an important factor in building up this business. Because such simple work as urine analysis can easily be done, in a rough and ready fashion, by the doctor himself, the pharmacist must be prepared to lay out his analysis in such a way that the doctor can obtain the information he requires at a glance, at the same time registering in his subconscious mind that by sending his work out he is obtaining information which would be difficult for him to obtain himself in a busy surgery. The pharmacist who decides to attempt this work is advised, therefore, not to start by buying expensive apparatus and then settling down to study biochemical text-books, but to let the work come gradually, starting, perhaps, with qualitative urine analysis. After a time he will find that he can extend his work and invest in further quantities of

apparatus and tackle more difficult subjects.

A complete qualitative examination of a sample of urine can easily be carried out with the minimum of reagents. Reaction, specific gravity—requiring the use of hydrometers—sugar, albumin, bile, blood, etc., can all easily be tested for and identified. Later, microscopical examination of deposits may be made, for which a centrifuge is useful, but not essential. A microscope is a valuable piece of apparatus which should be the normal content of a pharmacy, but which is too often absent. The pharmacist who intends taking up biochemical analysis seriously will find it essential. Quantitative urine analysis requires little apparatus, and this work can be attempted very early in the pharmacist's experience, although most general practitioners are satisfied with a qualitative analysis only. The analysis of blood, cerebrospinal fluid, faeces, etc., can be tackled in due course, and details of the apparatus required and the methods to be adopted may be obtained from any text-book of biochemical analysis. There are other aspects of this work in which the pharmacist could be of use once he has built up his connexion, and the examination of blood films for the malarial parasite, is one of these. A microscope with a 12th-inch oil immersion lens is all that is required, together with suitable stains such as Giemsa, Leishmann, or Fields. The examination of a smear from the throat or teeth can easily be tested for Vincent's spirochaetes. Blood counts can be done provided a suitable haemocytometer is obtained, and urethral discharge can be examined for pus cells and gonococci.

The Pharmaceutical Society's Diploma in Biochemical Analysis is a useful adjunct to carrying out this work but in the field of biochemical analysis all pharmacists with initiative have a just claim. C. B. H.

SOUTH AFRICAN NOTES

New Durban Industry.—An important factory may be established in Durban for making hydrolysed protein on a large scale. Experiments by Dr. D. A. Dormer, South Africa's chief tuberculosis officer, are stated to have proved that this protein yields good results in the treatment of tuberculosis and other wasting diseases. Impressed with the project's potentialities, the Industrial Development Corporation of South Africa has indicated, according to information released in Cape Town, that it is prepared to consider assisting substantially with the capital required for the factory and plant, provided private initiative undertakes actual production.

Additional Opening Times Suggested.—It has been suggested that chemists' shops in large South African towns should at once return to the pre-war practice of opening for an hour on Saturday evenings and for limited periods on Sunday mornings and evenings. A member of the Cape Pharmaceutical Society said, however, that this suggestion could not be put into effect. He pointed out that the shop hours ordinance which came into force in April, 1941, prohibited such opening of chemists' shops. He also said that adequate provision had been made for the dispensing of prescriptions at all hours of the day and night. In Cape Town, for instance, there was a central chemist available at all times, and in the suburbs the Society had arranged, by means of a rota system, that a similar service would be available to all members of the public. After the normal hours no chemist was entitled to sell anything other than urgent prescriptions, except in cases of emergency.

A Rapidly Expanding Business.—Few firms can claim such rapid development as Drugs & Toilets (Pty.), Ltd., which has recently moved into a four-story building, Samkay House, Marshall Street, Johannesburg. The company has been established since 1934, but before that date its founders were running a number of retail shops, trading as Asher's Pharmacy, Ltd. At the outset Drugs & Toilets made their headquarters in President Building, but the growth of the business was so great that after only three years a move was made to larger premises in Delmark House. These had to suffice until the company could erect Samkay House last year and take occupation in September. Manufacture of agency lines is carried out under the supervision of chemists, the manufacturing

department of the concern being equipped with the latest plant. Samkay House has been designed and built as one of the most modern chemical factories in the country. In addition to this headquarters, the firm operates a chain of distributive depots.

Unrestricted Penicillin.—A South African correspondent writes: Any person in South Africa who has a notion that 100,000 units of penicillin will cure him of his aches can walk into a chemist's shop and buy the drug over the counter. He does not require a doctor's prescription or recommendation. It has been a widely-published fact that the valuable drug should only be used in cases where no other drug can be employed, but this has not stopped members of the public from regarding it as a panacea of all ills. It is astonishing to learn that in Johannesburg chemists' shops are in possession of millions of units of penicillin and that the precious phials can be sold as readily as any patent medicine. The only drawback to the use of penicillin to the public is that it is administered by injection, but this does not stop anxious mothers from persuading family doctors to administer the drug for children's minor hurts. A Johannesburg chemist showed an investigator a vial containing 100,000 units, and he was told that he could buy it if he wanted it. Another chemist showed a number of preparations which contain penicillin and which are easy to administer. These were eye-drops and preparations for external use. While the public is free to "waste" the drug, the Johannesburg General Hospital and other similar institutions in South Africa are making extremely cautious use of it. Doctors who require it for their hospital cases are required to make application, stating exactly how much they require and for what purpose. Doctors who attend the Johannesburg General Hospital are emphatic that there are no wastages there. At the same time they admitted that other practitioners, with pressure applied to them by patients, were known to be wasting the drug.

Air War Against Pests.—The world's largest helicopter has been enlisted into service in the chemical war against agricultural pests. The helicopter has a capacity of about four tons of insecticide, and is to be used to skim over growing crops and spray them with insecticide or weed-killer. A demonstration flight was watched recently by Empire scientists.

OVERSEAS TRADE NEWS

Canadian Penicillin Control Bill.—The Canadian House of Commons has given third reading to a Bill giving the Health Department authority to limit the sale of penicillin to persons using it under doctors' orders.

Anglo-Hungarian Payments Agreement.—The draft agreement between Great Britain and Hungary covering mutual payments between the two countries, and already accepted by the Hungarian Economic Council, has been submitted to the Hungarian Cabinet for approval.

Czech Trade Agreement with Bulgaria.—Prague radio stated on August 9 that Bulgaria will send tobacco and agricultural produce to Czechoslovakia in exchange for agricultural machinery, chemicals and iron and steel goods, under an agreement signed between the two countries.

Indian Linseed for United Kingdom.—A Reuter message from Bombay states that 14,000 tons of linseed are reported to have been granted to the United Kingdom by the Central Government of India. It is estimated that total linseed exports from India during the period April 1, 1946 to March 31, 1947, will be 70,000 tons.

Canadian Food and Drugs Bill.—The Canadian Senate recently gave a second reading to a Bill to amend the Food and Drugs Act. It is stated that the main effect of the Bill is to enable regulations to be made to govern the sale of "potent, new drugs," the full effects of which are not yet known to the medical profession.

New Oil Extraction Process.—A new oil extraction process which is claimed to increase the yield from linseed, castorseed, cottonseed and other oil-bearing seeds and beans has been developed in the United States. The new process is said to increase extraction up to 98½ per cent. of the available oil or 6½ per cent. better than any other process.

U.S. Castor Oil Position.—A New York message states that the castor oil position is tight in view of the fact that two U.S. crushers have closed down, and no castorseed is on offer from South America. Paraguayan or Brazilian castor oil is offered in New York at 25½ cents per lb., cost and freight, and an import licence is required. The castor oil import duty is 3 cents per lb. The maximum price within the United States is 14.3 cents per lb., but no offers will be made until ceiling prices are raised or decontrolled.

Public Control of German Dye Plant.—A Reuter dispatch from Frankfurt states that the German Council of States ("Landerrat") has asked the Allied Military Government to allow provincial administrations, municipalities and public corporations to take over the works of the former I.G. Dye Trust Co. so as to prevent them, under present financial conditions, from being acquired by private interests. The Council said their proposal would not prejudice a final solution and would not mean nationalisation.

Canadian Penicillin Exports.—Canadian penicillin exported from Canada has reached many foreign countries. UNRRA has obtained large amounts for the liberated territories of Europe and the Far East, and has requested further substantial supplies this year. Air shipments have been made to as widely separated countries as Poland, Iceland, India and China. UNRRA is building penicillin production units in Poland, Czechoslovakia and Yugoslavia, the nucleus of the technical staffs for those units being trained in a Canadian laboratory. Equipment is also being obtained in Canada.

Belgian Congo Palm Oil Exports.—A recent report indicates that the Belgian Congo expects an exportable surplus of palm oil in 1946 of about 106,000 short tons. This compares with shipments of 84,800 tons in 1945 and the five-year (1935-1939) average of 73,000 tons. The Belgian Congo is Africa's leading region in establishing modern oil-palm plantations. In the past decade, new high-yielding varieties of palm nuts have been developed and yields of palm oil on new plantations compare favourably with those obtained in Sumatra and Malaya during pre-war years.

Dutch-Yugoslav Trade Agreement.—A message from the Hague states that the Dutch-Yugoslavian trade and payment agreement, signed in Belgrade on August 3, aims at the return to normal of commercial traffic between the two countries. Up to the present, commodity exchange has only been possible on the basis of payment in currency or by means of private compensation transactions. A reciprocal quota has been fixed, with Holland importing Yugoslavian timber, ore, hops and tanning extract, etc., and exporting electro-technical products, machine tools, rayon yarns, dyestuffs and chemicals. The question of payment is covered by a monetary clause, the dinar-guilder exchange rate being fixed at 18.867.

TRADE REPORT

Spot quotations for pharmaceutical chemicals represent the prices for wholesale quantities of standard quality. Prices of crude drugs and essential oils vary as to brand or grade.

28 Essex Street, W.C.2, August 14

THE week has again been characterised by a steady though not very large volume of business at prices little altered from those recorded during recent weeks. The supply position is about unchanged but a good many shipment prices are now coming through for articles not seen on the markets for several years. Prices asked for these items are generally very high, in some instances out of all proportion to buyers' ideas in this country. In the PHARMACEUTICAL CHEMICALS markets, makers and dealers have nothing of outstanding interest to report.

Crude Drugs

Dealers in these commodities report little change in the situation, with business rather slower than usual and few alterations in quotations. No further information has been received regarding AGAR since the report that importation of the Japanese product through official channels was being considered. The position regarding Cape ALOES is difficult with developments slow. Users of ANTIMONY continue to absorb available supplies of that metal. Afloat parcels of Sumatra BENZOIN are being readily taken up. Reports on natural CAMPHOR include news of Chinese refined powder on the spot and offers from Formosa of tablets, slabs and powder. CARDAMONS continue quiet at unchanged prices. Afloat quotations for CASCARA SAGRADA are unaltered. A fair quantity of CASCARILLA quills is reported afloat; spot demand continues quite good. CLOVES are fractionally easier on the spot. Business in COLYCYNTH is exceedingly slow. ERGOT is slightly easier on the spot. GALBANUM and MASTIC GUMS are now offered on spot. The position of MENTHOL is very irregular with prices varying considerably; latest prices from Brazil and China, however, indicate comparable spot prices for material from both sources. The shipment quotation for Cochin NUX VOMICA is holding firm. RHUBARB is selling well at prices varying according to quality and holder. The Minister of Food has made an Order considerably increasing the price of SOYA FLOUR to cover advances in soyabeans. Quotations for selected grades of TRAGACANTH are unchanged. Rates for some grades of CARNAUBA WAX have been advanced, and prices of BEESWAX show some alteration on the week.

Essential Oils

As noted last week (p. 188) a few more essential oils have been removed from the official scheme of distribution. The full list of oils so far removed from the scheme is as follows:—

BAY	LEMONGRASS
CADE	NEROLI
CINNAMON LEAF	ORIGANUM
EUCALYPTUS	PATCHOULI
(citriodora)	PETITGRAIN (French and French North African)
FENNEL	ROSEMARY
GERANIUM	SASSAFRAS
GUAIACWOOD	(Brazilian)
LAVENDER	THYME
LAVENDER SPIKE	VETIVERT
LAVENDIN	
LIME	

Exchange Rates on London

Bank of England fixed rates at the opening on Wednesday morning were:—

Centre	Quoted	August 14
*Alexandria ...	Piastres to £	97½-97½
Brussels ...	Francs to £	176½-176½
Copenhagen ...	Kroner to £	19.32-19.36
Dutch West Indies	Florins to £	7.58-7.62
Oslo ...	Kroner to £	19.98-20.02
Paris ...	Francs to £	47.9-48.3
Lisbon ...	Escudos to £	99.80-100.20
Montreal ...	Dollars to £	4.02-4.04
New York ...	Dollars to £	4.02½-4.03½
Stockholm ...	Kroner to £	14.47-14.50
Zurich ...	Francs to £	17.34-17.36

* Free market rate.

U.S. Drug Market Report

New York, August 9

A SHORTAGE of materials and containers, a number of small strikes and the inability of manufacturers to obtain construction materials for plant expansion have contributed to "spotty" chemical production in the United States during the past few months, the Chemical Division of the Department of Commerce reports. Although wholesale sales and stocks of industrial chemicals have shown some recent increases, it will be several months before supplies meet domestic demand and conditions otherwise return to normal. There is a shortage of steel drums, paper and fibre containers, besides raw materials such as metals, the report notes. On the FINE CHEMICAL markets, trading in GLYCERIN is still at a standstill as a result of the rolling back of prices

to the old O.P.A. level for June 30. Buyers are hoping, however, that the O.P.A. will permit them to sell material at 21 cents per lb. in tank cars, compared with the 18 cent ceiling price. Glycerin is already in very tight supply here. Business in MERCURY turned slightly more active during the week, though no price change was reported. Advices arriving here from Italy state that the special sales tax on mercury in that country has been reduced to 500 lire per flask from 2,000 lire. The trade expects an increase in the maximum price for synthetic CAMPHOR in the near future because of the exceedingly tight supply position that has arisen in the product. Offerings of Brazilian MENTHOL are still being made at \$8.50 per lb., while the Chinese product, about 1,000 cases of which are reported to be on their way to this country, is currently quoted at \$8.75 per lb., duty paid. Seasonal dullness prevailed on the BOTANICAL DRUG markets during the week, with demand generally limited to immediate requirements. Domestic collections are reported below expectations in most cases, exceptions being in SENECA and CASCARA. The outlook for ARNICA FLOWERS is also disappointing, a large proportion of the European exports to this country having been detained by the Food and Drug Administration, while unfavourable weather conditions at home have resulted in a poor crop. Unconfirmed reports reaching here indicate that an attempt is being made to buy up the entire Indian PAPAIN output over the next three years; the demand in the U.S. for this item is steadily growing. It is believed in trade circles that shipments of CINCHONA from the Netherlands East Indies will be resumed in the near future; at present, this country is entirely dependent upon supplies from South America. Quotations on NUTMEG and MACE are higher; this follows reports reaching here to the effect that export licences are being refused in the West Indies for nutmegs sold above 25 cents per lb. and mace above 50 cents per lb., although earlier transactions were at 45 cents and 90 cents respectively. Italian BERGAMOT OIL eased further during the week and is now quoted down to \$4.85 per lb. against a minimum of \$5.10 last week. Distillation of the domestic PEPPERMINT crop is now under way, and the trade expects a comparatively normal output this season. Most AROMATICS are still in short supply brought about by the limited quantities of basic materials available. Price fluctuations during the week under review were small in number and extent.

Pharmaceutical Chemicals

ACETANILIDE.—Powder is priced at 2s. 5d. per lb., and crystals at 2s. 6d.

AMPHETAMINE.—Makers' quotation continues steady at 150s. per lb.

ASPIRIN.—Home market prices per lb., in quantities of 28-lb.-1-cwt., are (containers in brackets): 4s. 1½d. (1-lb.); 4s. (4-lb.); 3s. 1d. (7-lb.); 3s. 10½d. (14-lb.); 3s. 9½d. (28-lb.).

BROMIDES.—POTASSIUM, in quantities of 28 lb., is quoted at the following rates per lb. (containers in brackets): 3s. 2½d. (1-lb.); 3s. 1d. (4-lb.); 3s. (7-lb.); 2s. 11½d. (14-lb.); 2s. 10½d. (28-lb.). SODIUM, 1½d. per lb. less, and AMMONIUM, 1½d. per lb. more, than above prices. Prices are net, without engagement.

CODEINE.—Prices per oz. current in the home market are: PURE, ½ oz., 51s. 9d.; 1 oz., 49s. 3d.; 2 oz., 47s. 9d.; 3 oz., 47s.; 4 oz., 46s. 9d. HYDROCHLORIDE, ½ oz., 46s. 4d.; 1 oz., 44s.; 2 oz., 42s. 6d.; 3 oz., 41s. 9d.; 4 oz., 41s. 6d. PHOSPHATE, ½ oz., 40s. 9d.; 1 oz., 38s. 3d.; 2 oz., 36s. 9d.; 3 oz., 36s.; 4 oz., 35s. 9d. HYDROBROMIDE and IODIDE, as PURE; SULPHATE, as HYDROCHLORIDE.

DIAMORPHINE.—Prices per oz. are: PURE, ½ oz., 54s. 6d.; 1 oz., 52s.; 2 oz., 50s. 6d.; 3 oz., 49s. 9d.; 4 oz., 49s. 6d. HYDROCHLORIDE, ½ oz., 50s. 3d.; 1 oz., 47s. 9d.; 2 oz., 46s. 3d.; 3 oz., 45s. 6d.; 4 oz., 45s. 3d.

ETHYLMORPHINE.—Current rates per oz., in the home market, are: PURE, ½ oz., 57s. 6d.; 1 oz., 55s.; 2 oz., 53s. 6d.; 3 oz., 52s. 9d.; 4 oz., 52s. 6d. HYDROCHLORIDE, ½ oz., 49s.; 1 oz., 46s. 6d.; 2 oz., 45s.; 3 oz., 44s. 3d.; 4 oz., 44s.

GLUCOSE.—Powdered monohydrate for the home trade is quoted as follows: 14 lb.-28 lb., in 14-lb. lots, 11½d. per lb.; 28 lb.-112 lb., in 14-lb. lots, 11½d.; 28-lb., 10½d.

HOMATROPINE.—Makers' prices per oz. are as follows (prices per gram in brackets): ALKALOID.—1 oz., 97s. 6d.; 4 oz., 92s. 6d.; 16 oz., 87s. 6d. (4s.). HYDROCHLORIDE, HYDROBROMIDE and SULPHATE.—1 oz., 75s.; 4 oz., 70s.; 16 oz., 65s. (3s. 2d.).

IODINE PREPARATIONS.—As noted recently, home quotations have been advanced by threepence per lb. New rates per lb. are as follows: POTASSIUM IODIDE, B.P.—112 lb., 9s. 6d.; 28 lb., 10s.; 14 lb., 10s. 6½d.; 7 lb., 12s. 0½d.; 4 lb., 12s. 6½d.; smaller quantities, 13s. per lb. SODIUM IODIDE, B.P.—28 lb., 10s. 5d.; 14 lb., 10s. 11½d.; 7 lb., 12s. 8½d.; 4 lb., 13s. 4½d.;

smaller quantities, 14s. 2d. **IDOFORM**, B.P.—28 lb., 13s. 7d.; 14 lb., 14s. 1½d.; 7 lb., 16s. 3½d.; 4 lb., 17s. 1½d.; smaller quantities, 17s. 1½d. **IDOFORM CRYSTALS**, 2s. per lb. above powder prices. **IODINE RESUB-LIMED**, B.P.—112 lb., 10s. 11d.; 28 lb., 11s. 5d.; 14 lb., 11s. 11½d.; 7 lb., 13s. 9½d.; 4 lb., 14s. 4½d.; smaller quantities, 15s. 10d.

LACTATES.—Prices are as follows: **LACTIC ACID**.—Six-winchester lots, 3s. per lb.; smaller quantities, 3s. 1d. **CALCIUM LACTATE**.—Small quantities, 2s. 5d. per lb. **CALCIUM SODIUM LACTATE**.—Powder, small lots, 3s. 7d. per lb.; 14 lb., 3s. 4d.; 28 lb., 3s. 2d.; granular, one penny per lb. extra.

MANDELIC ACID.—In good demand. Current quotations are as follows: 1 lb., 22s. per lb.; 4 lb., 20s. 3d.; 7 lb., 18s. 6d.; 14 lb., 16s. 9d.; 28 lb., 15s.

METHYL SALICYLATE.—In fair supply. Smalls are quoted at 2s. 6d. per lb.; winchesters at 2s. 1½d.; 56 lb., in demijohns, 2s.; 1 cwt., in demijohns or carboys, 1s. 1½d.; 5 cwt., 1s. 11d. All prices net.

PHENOLPHTHALEIN.—Current prices are: 1 cwt., 4s. 10d. per lb.; 28 lb., 5s.; 14 lb., 5s. 3d.; 7 lb., 5s. 6d.

POTASSIUM PERMANGANATE.—Current rates are as follows: B.P. (in 1-cwt. drums), 1 cwt. and over, 1s. 8½d. per lb.; 3 cwt. and over, 1s. 8d. **TECHNICAL** (in 1-cwt. drums), 1 cwt. and over, 166s. 3d. per cwt.; 3 cwt. and over, 161s. 9d.; 5 cwt. and over, 159s. 3d.; 1 ton and over, 156s. 9d.; 4 tons and over, 154s. 3d. **TECHNICAL** (in 5-cwt. drums), 5-cwt. and over, 156s. 9d. per cwt.; 1 ton and over, 154s. 3d.; 4 tons and over, 152s. Terms net, carriage paid to nearest station, containers extra and returnable.

PULV. BISMUTH, CO., N.F..—Current rates per lb. in the home market, in quantities of 28 lb.-112 lb., are as follows (containers in brackets): 2s. 9d. (1-lb.); 2s. 8d. (2-lb.); 2s. 7½d. (4-lb.); 2s. 6½d. (7-lb.); 2s. 6d. (14-lb.); 2s. 5d. (28-lb.).

THEOBROMINE.—Prices per lb., in quantities of 28 lb., are as follows: **ALKALOID**, B.P.C., 30s. 6d.; **CALCIUM SALICYLATE**, 19s. 3d.; **SODIUM SALICYLATE**, 19s. 3d.

Crude Drugs

AGAR.—No further information regarding this product has come to hand.

ALOES.—Forward value of Cape is at 140s. per cwt., c.i.f. Curaçao is firm at 250s. c.i.f.; spot, 300s.

ANTIMONY.—Demand continues on a heavy scale, with all output being readily

taken up. Quotations are held at the following levels: Minimum 99.6 per cent. regulus, £132 10s. per ton; minimum 99 per cent., £125; 70 per cent. crude, for the home trade, £105 per ton, delivered.

ARECA NUTS.—Spot quotations continue at 70s. per cwt.; shipment, unchanged at 50s., c.i.f.

BALSAMS.—*Canada* is offered on the spot at 14s. 6d. per lb.; *Peru*, steady at 8s., duty paid, and 7s. 6d., in bond. *Tolu* and *Copaiba* are unobtainable.

BENZOIN.—A good demand is noted for afloat material at £25 per cwt., landed.

BISMUTH.—Price of high-grade metal is unchanged at 9s. per lb., in minimum 5-cwt. lots.

BUCHU LEAVES.—Quoted on the spot at 4s. 9d. per lb.

CAMPHOR.—Various parcels of Chinese refined powder on spot are quoted at 11s. to 12s. per lb., according to tests which vary from 95 per cent. to 99 per cent. Offers of refined are reported from Formosa as follows: Tablets, ¼ oz., in 1-lb. cardboard boxes, 10s. per lb., c.i.f.; slabs, 9s. 2d. per lb., c.i.f.; powder, .3 per cent. oil, 9s. 6d. per lb., c.i.f.; powder, .7 per cent. oil, 8s. 6d. per lb., c.i.f.

CARDAMOMS.—Quiet, prices unchanged. Aleppy seeds are quoted on the spot at 8s. 6d. per lb.; and Aleppy greens at 7s. 6d.; Mangalore heavy are priced at 6s. 6d.

CASCARA SAGRADA.—Some afloat bark is quoted at 300s. per cwt., landed duty paid.

CASCARILLA.—Quills are offered on the spot at 2s. 9d. per lb. Demand is good and a fair quantity is reported afloat.

CHAULMOOGRA.—*Hydnocarpus*, in tins in cases, is available on spot at 2s. per lb.

CHILLIES.—Steady conditions obtain in these markets. Mombasa, spot sellers at 155s. per cwt.; August-September shipment, 140s., c.i.f., buyers' licence.

CINNAMON.—Steady conditions obtain for chips which may be had at 2s. 2d. per lb., on the spot.

CLOVES.—In quiet demand, with spot sellers in London at the fractionally easier figure of 11½d. per lb.; August-September shipment, 9½d. per lb., c.i.f., buyers' licence.

COCHINEAL.—Silvers are obtainable on spot at 5s. 6d. per lb., and blacks at 5s. 9d.

COCOA BUTTER.—Price continues to be fixed at 1s. 5½d. per lb., ex factory or warehouse, except under licence.

COLOCYNTH.—Business is exceedingly

slow at present. Price is unchanged at 2s. 9d. to 3s. per lb.

DIGITALIS LEAVES.—Portuguese is steady on spot at from 130s. to 140s. per cwt., and English-grown at 2s. 6d. per lb.

ERGOT.—Spot price is now at 7s. per lb.

GALBANUM.—Offered at 7s. 6d. per lb. in bond.

GUM ACACIA.—Kordofan cleaned sorts is firm on spot at 77s. per cwt.; bleached, steady at 150s.; Talha, cleaned, 42s. 6d.

GUM MASTIC.—Spot offers are at 18s. 6d. per lb.

HENBANE.—Indian leaf is firm on the spot at 250s. per cwt.; Egyptian (*muticus*) may be had at 90s.

KARAYA GUM.—Spot quotation for No. 1 Indian gum is at 200s. per cwt.

KOLA NUTS.—Current spot prices are: African quarters, 8d. per lb.; African halves, 6d.; Jamaican washed halves, 7d.

LIQUORICE ROOT.—Natural Anatolian, spot, 85s. to 90s. per cwt.; cut, 110s.

MENTHOL.—It is difficult to assess the true position of this item; prices vary considerably. For example, odd spot lots are changing hands at 37s. 6d. per lb., while some Brazilian afloat is reported to be selling at 47s. 6d. to 50s. per lb. Firm offers are noted from China at 45s., c.i.f., for August-September shipment, which would make a spot price of 55s., duty paid. The latest price from Brazil is at 41s., f.o.b., which would mean a spot price similar to that of the Chinese.

MERCURY.—Prices are controlled by the Control of Mercury (No. 11) Order, 1945 (S.R. & O., 1945, No. 1129) (C. & D., October 13, 1945, p. 388).

NUX VOMICA.—Shipment quotation for Cochin is holding firm at 40s. per cwt., c.i.f.

ORANGE PEEL.—Spanish quarters are at 2s. 9d. per lb., and sweet ribbon at 2s. Fine-cut Tripoli would be worth 4s. 9d. to 4s. 10½d. on the spot.

QUILLIA BARK.—Natural, spot, 120s. per cwt.; cut, 145s.

RHUBARB.—Common-round is selling on spot at 11s. 6d. to 14s. per lb., according to quality and holder.

SAPONIN.—Chilean, in bond, 9s. per lb., ex wharf Liverpool.

SEEDS.—Current quotations are as follows: **CORIANDER.**—Spot, Indian, 90s. per cwt.; Moroccan, 90s., ex wharf London or Liverpool. **CUMIN.**—Spot, Indian, 205s.; Moroccan, 200s., ex wharf London. **DILL.**—

Spot, Indian, 70s., ex wharf London; 67s. 6d., ex wharf Liverpool. **FENNEL.**—Spot, Indian, 160s., ex wharf London. **FENUGREEK.**—Spot, Indian, 70s., ex wharf London; 67s. 6d., ex warehouse Liverpool. **CELERY.**—Spot, Indian, 1s. 6d. to 1s. 8d. per lb., ex wharf London or Liverpool.

SOYA FLOUR.—The Soya Flour (Control and Maximum Prices) Order, 1946, in force on August 11, increases the maximum price of soya flour from £33s. 5s. to £52 5s. per ton, ex mill, and from 5d. to 7½d. per lb., by retail sale.

TRAGACANTH.—Selected grades are quoted at £155 per cwt. Medium grades are quoted as follows: No. 1 white, £145 per cwt.; No. 2 white, £125; No. 3 white, £110; No. 4 white, £85; pale leaf, £50; amber leaf, £50; dark amber, £35; brown leaf, £25; red-and-brown leaf, £20; red leaf from £17; hoggy, £12 to £15.

TURMERIC.—Madras finger, on spot, would be worth 95s. per cwt., ex wharf London, and 92s. 6d., ex store Liverpool.

VALERIAN.—Belgian root is quoted on the spot at approximately 250s. per cwt.

WAXES.—Current rates for CARNAUBA are: Fatty, grey, spot, 1,040s. per cwt.; chalky, 1,000s.; prime yellow, 1,200s.; fatty grey, afloat, 1,015s.; prime, afloat, 1,150s. **BEES'.**—Quoted on the market as follows: Dar-es-Salaam, spot, 335s. per cwt.; afloat, 330s., c.i.f.; forward, 335s.; Benguela, spot in bond, 205s.; shipment, nominal, 295s. **OURICURI.**—Spot, nominal; shipment, August-September, 6 per cent., 62os., c.i.f. **CANDELILLA.**—Spot, 490s. per cwt.; to arrive, 490s. landed.

Essential and Expressed Oils

CASTOR.—The following are the prices for bulk supplies: "Firsts," £82 per ton; "seconds," £80, both naked ex works.

CLOVES.—English distillers continue to quote at 12s. per lb.

COCONUT.—Bulk supplies of crude oil continue at £49 per ton, but refined deodorised was recently advanced by £7 per ton to £56. Refined hardened deodorised was increased by £7 per ton to £60. All prices are naked ex works.

COTTONSEED.—Official quotations are as follows: Crude, £52 2s. 6d. per ton; washed, £55 5s.; refined edible, £57; refined deodorised, £58, naked ex works.

GROUNDNUT.—Bulk supplies are officially quoted as follows: Refined deodorised, hardened to 40°, £62 per ton; refined deodorised, hardened to 50°-52°, £63.

TRADE MARKS

(From "The Trade Marks Journal," July 1946)

"CORIOLAN" and "VANIDOR"; for brilliantine, dentifrices, bath salts, lipstick, talcum powder, face powder and face cream, all being non-medicated toilet preparations (3). By COTY (England), Ltd., 3 Stratford Place, London, W.1. 641,255/60.

"HYPABETA"; for all goods (5). By Sharp & Dohme, Ltd., 4 Brocket Road, Hoddesdon, Herts. 637,169.

"PHERESTANE"; for pharmaceutical, veterinary and sanitary substances; insecticides, preparations for destroying vermin (5). By Imperial Chemical Industries, Ltd., Wexham Road, Slough, Bucks. 638,528 (Associated).

"ANAPEX"; for medicated preparations for human use (5). By Medo-Chemicals, Ltd., 178 Pentonville Road, London, N.1. 639,681.

"EQUINASE"; for pharmaceutical preparations for human use (5). By Bengué & Co., Ltd., Mount Pleasant, Alperton, Wembley, Middlesex. 641,014.

"MOTTIPS" and "ODOTS"; for insect destroying preparations (5). By Commanditaire Venootschap Chemische Fabriek Rids, Middenhavenstraat 36, IJmuiden, Netherlands. 640,069/70.

"LIPOBIN"; for pharmaceutical preparations (5). By The Lakeside Laboratories, Inc., 1707 East North Avenue, Milwaukee, Wisconsin, U.S.A. 641,057.

"HADDIT"; for insecticides, preparations for killing weeds and destroying vermin and disinfectants (5). By Potter & Clarke, Ltd., 60, 62 & 64 Artillery Lane, London, E.1. 641,072.

"GLYSECT"; for insecticides (5). By Glysan Products, Ltd., 423 Harrow Road, London, W.10. 641,197.

"QUIRK"; for safety razors (8). By John Hutton, 61 Southerton Road, London, W.6. B640,027.

"HYPOCAR"; for surgical, medical, dental and veterinary instruments and apparatus (10). By George Carsberg, Ltd., 7/9 Meredith Street, Clerkenwell, London, E.C.1. 640,942.

"KLEONA"; for baby sootherns, feeding bottles, feeding bottle teats, feeding bottle valves, teething rings, and surgical rubber gloves (10). By Whitley & Co. (Manchester), Ltd., 7 Clyde Road, Manchester, 20. 641,059.

"MANDELLE"; for hospital sheeting, made wholly or principally of rubber (17). By J. Mandelberg & Co., Ltd., Albion Works, Cobden Street, Pendleton, Salford 6, Lancs. B640,897.

APPLICATIONS AMENDED AFTER ADVERTISEMENT.

Specification 638,501 by Douglas Saloons, should be altered so as to read "Hair cream, brilliantine, shampoos, face powder and perfumes."

Specification 639,542 by William Melville Nicoll, should be altered so as to read "All goods included in Class 5, except vaccines."

Specifications 637,846/47/48 by Ilford, Ltd., should be altered so as to read "Photographic chemicals; photographic sensitized materials, but not including photographic materials used in planographic printing."

Specifications 5530, 506,802 and 506,803 by Phosferine (Ashton & Parsons), Ltd., have been altered to the form as reproduced in "The Trade Marks Journal," July 31, 1946.

(From "The Trade Marks Journal," August 7)

"CALMAG"; for agricultural and horticultural chemicals (other than insecticides, fungicides and weed killers), and natural and artificial manures (1). By Calmag Research Co., Ltd., 85/86 Darlington Street, Wolverhampton, Staffs. 640,912.

"GLIS"; for cleaning, polishing, scouring and abrasive preparations (3). By Gospo, Ltd., 14 Finsbury Circus, London, E.C.2. 637,005 (Associated).

"CLEFF"; for toilet powder compacts (3). By The Wickham Precision Tool & Turning Co., Ltd., 48 Hatton Garden, London, E.C.1. 638,968.

"SPRYOKLEEN"; for cleaning preparations (3). "SPRYO"; for insecticides, insect repellents and moth-proofing preparations, disinfectants and deodorisers (5). By Carlton Laboratories, Ltd., 1/5 Joiners Arms Yard, Denmark Hill, London, S.E.5. 639,029 and 638,951 (Associated).

"UTILEX"; for polishing preparations and soap (3). By The Gry-Moff Co., Ltd., Union Works, Union Lane and Westcroft Street, Droitwich. 639,158 (Associated).

Design incorporating a shield on solid rectangular block; for soap (3); for pharmaceutical and sanitary substances, medical and surgical plasters, disinfectants, weed killers and vermin destroyers (5); for surgical, medical and veterinary instruments and apparatus (10). By Calmic, Ltd., Lostock Grange, Westhoughton, Lancs. 639,811/2/3 (Associated).

"PATNOL"; for perfumery, essential oils, toilet preparations (not medicated), cosmetics, hair lotions and dentifrices (3). By Craigbank Chemical Co., Ltd., 170 Buchanan Street, Glasgow, C.1. 640,306.

"IMPREVU", "REVANCHE", and "DEB-TONE"; for bath salts, talcum powder, face powder and face cream, all being non-medicated toilet preparations; dentifrices, lipstick, soaps, perfumes, brilliantine and hair lotions (3). By COTY (England), Ltd., 3 Stratford Place, London, W.1. 640,616/621/641,258.

"AEROCLEAN"; for degreasing preparations not for use in industrial processes or in the course of manufacture (3). By Marquis Manufacturing Co., Ltd., Bates Buildings, Rickmansworth Road, Chorley Wood, Herts. 640,669.

"AFFINITY"; for soaps, perfumery, non-medicated toilet preparations, essential oils, dentifrices and cosmetic powder boxes (3). By Icilma Co., Ltd., 435 London Road, Isleworth. 641,310.

"VALENOL"; for pharmaceutical preparations for use in the treatment of nervous disorders and seasickness (5). By Chemi-Synthetics, Ltd., Cubitt Town Wharf, Saunderness Road, Cubitt Town, London, E.14. 637,119.

"FLUXEX"; for pharmaceutical products (5). By Jean La Camera, 2 rue Louis Besquel a Vincennes (Seine), France. B369,085.

"SIRIUS"; for veterinary preparations and substances, all made from herbs (5). By Juliette de Bairac-Lévy, 244 Burton Road, Manchester, 20. 640,023.

"NESCAPE"; for insecticides (5). By Promedico Products, Ltd., 21/22 Turle Road, London, N.4. 640,256.

"STEROGYL 15" (numeral 15 disclaimed); for pharmaceutical products for human use (5). By Roussel Laboratories, Ltd., 95 Great Portland Street, London, W.1. 640,454.

"CIMPSOL"; for pharmaceutical, veterinary and sanitary substances (5). By The Zirol Chemical Co., Ltd., Zirol House, Salisbury Road, Shaftesbury, Dorset. 640,859.

"BARDERN"; for preparations for the prevention of disease of the skin (5). By John Knight, Ltd., The Royal Primrose Soap Works, Silvertown, London, E.16. 640,990 (Associated).

"GUTTILIN"; for medicated preparations for the treatment of eyes, nose and throat (5). By Bengué & Co., Ltd., Mount Pleasant, Alperton, Wembley, Middlesex. 641,016.

"MEDITOXAL"; for all goods (5). By Savory & Moore, Ltd., 61 Welbeck Street, London, W.1. 641,202 (Associated).



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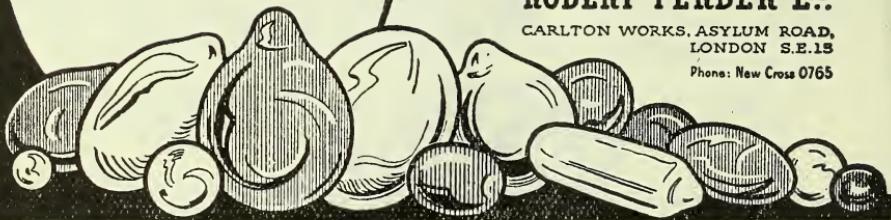
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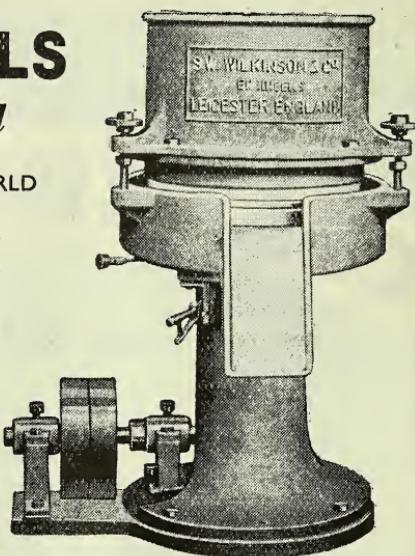
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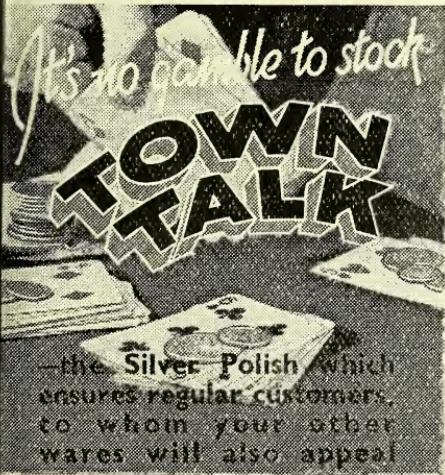
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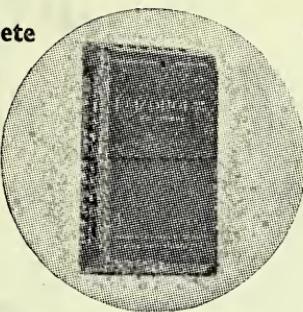
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OZONOL LABORATORIES (1930) LTD.
NEW WHARF ROAD, LONDON, N.1



LINTS · BANDAGES
COTTON WOOL
PLASTER MUSLIN
MATERNITY PADS
GAUZE

Carus
OF DARWEN

HODDLESDEN MILL · HAMPDEN MILL · ATLANTIC MILL · SPOTLAND BRIDGE MILL



ISAAC WEBSTER & SONS, LTD.
ABBEY WORKS, KIRKSTALL, LEEDS, 5
Telephone: 51580 Headingley. Telegrams: Isaac Webster, Kirkstall.

GYNEX Gynex, the safe prophylactic and antiseptic for female hygiene is rapidly forging ahead, leaving profits and goodwill in the hands of those Chemists who stock it.

GYNEX Comprising a complete outfit (or refill) GYNEX is now attractively dressed in new coloured boxes which, with show cards available, make a quiet but effective window display.

GYNEX

GYNEX

GYNEX

PRICES:
GYNEX COMPLETE OUTFIT
Retail 7/6.
Wholesale 57/- doz.
GYNEX REFILL: Retail 7/-
Wholesale 52/- doz.
SEND TRIAL ORDER TO-DAY

GYNEX (Formerly known as Patentex)

*A
regular
repeater*

Merz & Co. Ltd.

Monument Buildings,
MONUMENT STREET,
LONDON, E.C.3.



Your customers will be looking for the name
LIBRANESE on Table Cloths, Curtain Material,
Kiddies Capes, Pixie Hoods, Pilches, Triangles.

In lovely

Libranese TRADE MARK
THE HALLMARK OF PLASTICS

Obtainable from all leading Wholesalers
Sole Manufacturers :
BRAINOS & Co., 225 Southwark Bridge Rd., London, S.E.1

8

S 1

TRADE MARK

PRICE LIST

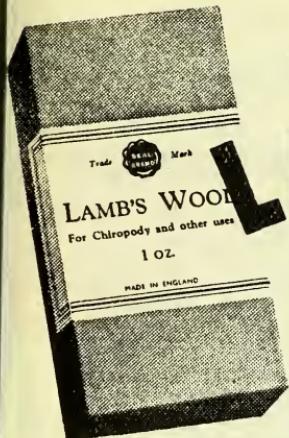
«WB»

MEDICAL PRODUCTS

WARD. BLENKINSOP
& CO LTD

BROOKLANDS · HALEWOOD · LIVERPOOL

Our telephone number is HUNTS CROSS 1381
and our London Stockists are CURTIS & CO.
79 Baker Street, W. 1. Telephone WELbeck 7904



LAMB'S WOOL

FOR CHIROPODY AND OTHER USES

½ oz. - -	3/9 doz.	2 oz. - -	12/- doz.
1 oz. - -	6/9 doz.	4 oz. - -	22/6 doz.

Attractively packed in carton with transparent paper wrapping

WHOLESALE TERMS ON APPLICATION

All prices subject to 33½% Purchase Tax

JAMES MACDONALD

DAWSON STREET • GREENGATE • SALFORD 3

SURGICAL APPLIANCES



EXPERTS IN SPECIAL ARTICLES TO MEASURE. Ladies and Gents ABDOMINAL BELTS for all purposes. CHEST EXPANDING BRACES. SUSPENSORY BANDAGES, ELASTIC HOSIERY (seamed and seamless). TRUSSES (spring and elastic).

For all types of Hernia.

Wholesale Dealers in Medical Glass, Surgical Dressings, Invalid and Nursing Requirements. Water and Air-proof goods. General sundries.

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EST. 1830

11 WARSER GATE NOTTINGHAM
'Phone: Nottingham 40488. 'Grams: "Appliance, Nottingham"

"Mathoplast"[®]

ELASTIC DRESSING

A non-slipping, comfortable, antiseptic wound dressing. Easily applied. Retail, 6d. and 1s. Also supplied 1 yd. packs in various widths. Usual Trade Terms.



In view of restricted supplies of rubber, strictly rationed quantities only of all lines will be allocated to regular customers.

WILLIAM MATHER LIMITED
Dyer Street, Manchester, 15 (Est. 1826)

2 lines

YOU SHOULD NEVER BE WITHOUT

POROSAN*
Fruit Caps and Skin Rings (Recommended for the
Oven and Water Methods) for sealing 1 lb. & 2 lb.
Jam Jars.

In 3 Packs.
One Pound (12 Caps and Rings)
Two Pound (12 Caps and Rings)
"Fifty-Fifty" (6 each size)
3/4d.
per doz. Incl. Tax.
Spare Rings 10d. per doz. Tax Free.

'POROSAN'
(Original)
No. 1 Fruit Preserving Skin (Recommended for
Water Method). Can be cut to fit any size or shape
of jar or bottle and can be used over and over again.
In rolls 1/6 (six 2 lb. jars)
In rolls 4/- (eighteen 2 lb. jars)
Tax Free

DON'T FORGET TO ORDER REPLACEMENT RINGS AS WELL

Sole Distributors to the Trade:

S. MAW, SON & SONS, LTD. Aldersgate House, NEW BARNET, HERTS
MARKETED BY POROSAN LTD., 65-6 CHANCERY LANE, W.C.2

**People are
asking for
DOMESTOS**

.... but we
regret that sup-
plies of this
quick - selling
cleanser and
disinfectant are
held up owing
to a shortage of
bottles.



Limited deliveries at present
yet we look forward to ample
supplies in the future

DOMESTOS LIMITED
College Works, Newcastle-on-Tyne

Applied Before Work

ROZALEX
RECO BRAND

Keeps Hands Clean

Limited Supplies now available
through recognised Wholesalers

Only Pack (Temporary) available
Tins retailing at 2/1d. including
purchase tax

Retail discount 25%

ROZALEX LIMITED

10, Norfolk Street, MANCHESTER 2

**LABELS
OF
DISTINCTION**
FOR WHOLESALE MANUFACTURING
& RETAIL CHEMISTS

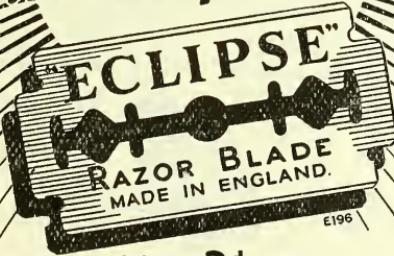
Medical and Dispensing Labels, Toilet, Cosmetic and Perfume, largest range of stock labels (attractive two-colour 50-60 wordings), Shampoo Powder Envelopes and Inners, also Saccharine Tablet Envelopes (new wording), with name and address. We can also offer multi-coloured advertising stamps in exclusive designs.

NEW REGULATIONS—
Send 6d. for complete
sample range

**CARILLON
PRESS LTD**

Artists in the Production of Fine Labels
BOURNEMOUTH

*Start the day
the Eclipse way*



including
Purchase Tax **3^d** each

Obtainable from your usual Wholesaler

JAMES NEILL & CO. (Sheffield) LTD.

**an
'ASPRO'
DISPLAY
BRINGS IN THE PASSER-BY!**

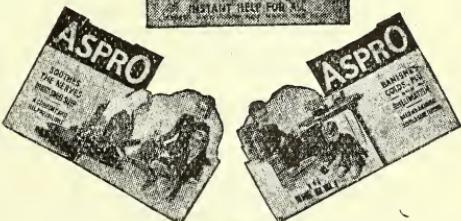
A new 'ASPRO' public has been growing up in recent years—people who, by practical experience, have come to value the ready help of 'ASPRO' in emergencies. All this growing interest benefits the shop which features A PROMINENT 'ASPRO' WINDOW DISPLAY. People who would otherwise be just "passers-by" become faithful and permanent customers, and their custom is reflected in the general volume of your business.

We look forward to the time when we can send you an entirely new display. In the meantime, if your present 'ASPRO' show is overdue for the salvage bin our stocks are still sufficient to supply you with another of the pre-restriction type illustrated below. Please write us if you need a display or seasonable stickers.

**Here is
'ASPRO'**



**the current
DISPLAY**



MADE IN
ENGLAND BY

P.A.T.A.

ASPRO LIMITED
Slough, Bucks.

Now ONLY ONE MINUTE TO COOK

**ALREADY
ON YOUR
SHELVES**

Robinson's are now advertising their 'Patent' Groats as requiring only ONE MINUTE to cook. You can confidently sell every tin even though some still show the old directions.

This is because national economy dictated that existing stocks of tins should be used first; but the new type of Groats has been going out now for eighteen months.

Keen Robinson & Co. Ltd., Carrow Works, Norwich.

CVS-100

"Leda"
BRAND OF

**D·D·T
LIQUID SPRAY**

Specially prepared for Household use.
NON-INFLAMMABLE, NON-POISONOUS,
NON-STAINING.

Ready for immediate use. Full directions on each container. Also in Powder Form. Samples and prices available to Wholesalers from Manufacturers.

LEDA CHEMICALS LTD.
94 ARCHWAY ROAD, N.19
ARC. 4877

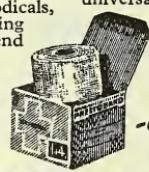
Sole Agents for Scotland:-
SOUTHERN MANUFACTURING CO. LTD.,
187, St. Vincent Street, Glasgow, C.2.

Sole Agents for N. Ireland:-
WHYTE, REID & MITCHELL, LTD.,
61/63, Donegall Pass, Belfast.

**BIG PLACINGS
in National and
periodical press!**

NOW the Prestoband campaign is swinging into its stride. Telling, selling advertisements are bringing valuable business to stockists everywhere.

FULL COVERAGE: Using all national dailies, Sunday papers and famous periodicals, the market is being covered from end to end.



Sticks to itself - but not to the skin

PRESTOBAND

THE ANTISEPTIC SELF-ADHESIVE BANDAGE
SOLE DISTRIBUTORS: FASSETT & JOHNSON LTD.
86 CLERKENWELL ROAD, LONDON, E.C.1



MEDICATED CHOCOLATE PRODUCTS

It is the intention of the Minister of Food to make an amendment to Part III of the First Schedule to the Chocolate, Sugar Confectionery and Cocoa Products (Control and Maximum Prices) Order, 1944, S.R. & O. 1944, No. 451. 2. It is not intended that the amendment to the Order shall in any way affect sugar confectionery, or, as regards chocolate and chocolate confectionery,

any product which:—

- (a) complies with a formula in the British Pharmacopœia, the British Pharmaceutical Codex, the National Formulary, the National War Formulary or recognised hospital formularies or pharmacopœias, or
- (b) is a preparation made up and supplied for the use of a particular person, being an article prescribed by reference to the needs of that person and supplied on and in accordance with a prescription duly given by a registered medical practitioner.
- 3. It is not, however, intended that chocolate and chocolate confectionery products should qualify for exemption from the provisions of the Order in future, merely by the inclusion among the ingredients of a therapeutic dose of a medicament which is the subject of a monograph contained in the British

Pharmacopœia or the British Pharmaceutical Codex, as hitherto.

4. Instead, a limited range of products which do not qualify for exemption under paras. (a) and (b), but which are considered to be primarily medicinal in character, will be named in a list of specifically exempted products to be included in the amendment.

5. Claims by manufacturers to have their products included in this category will be examined in the light of all the relevant factors, including the question of whether they are presented in such a form as to attract sales as sweet-meats. Claims based on vitamin content will not of themselves be regarded as justifying inclusion in the list.

6. Manufacturers, who wish to make claims for the inclusion of their products under para. 4, should forward samples together with a duly authenticated formula to:—

THE MINISTRY OF FOOD,
CHOCOLATE AND SUGAR
CONFECTIONERY DIVISION,
BLOCK A, LONDON ROAD,
STANMORE, MIDDLESEX.

either direct or, should they so prefer, through any Trade Association of which they are members.

7. Applications must be received by the Ministry of Food not later than August 24th, 1946.

The Knox Policy

The Policy of the Knox Laboratories Ltd., has always been one of creating product confidence by giving users an assurance of satisfaction or money refunded.

To-day, in their Nation-wide advertising, all announcements carry this guarantee of honest trading and straightforward dealing.

**MONEY REFUNDED
IF DISSATISFIED**

If for any reason you are dissatisfied with Cystex, return empty package to Manufacturers at address below, and the purchase price will be refunded in full.

Cystex
THE KIDNEY TONIC

For KIDNEYS, BACKACHE
RHEUMATISM

KNOX LABORATORIES LTD., 81 LAMB'S CONDUIT STREET,
LONDON W.C.1

AMPLE SUPPLIES
ARE NOW
AVAILABLE

All orders exe-
cuted promptly
in full.

Mendaco

For ASTHMA
BRONCHITIS, HAY FEVER

Memo
May we remind our clients
and friends, our service is
as always, quick and com-
prehensive and supplies are
fairly distributed.

Ferryman
OF SOUTHAMPTON

Wholesale and Manufacturing Chemists and
Wholesale Druggists; Suppliers of Proprie-
ties, Drugs, Sundries, Packed Foods and
Pharmaceuticals.

HERBERT FERRYMAN LTD.
COBDEN BRIDGE, SOUTHAMPTON.
Telephone: 74041 (5 lines)
Telex: Ferryman Southampton

NORTHERN POLYTECHNIC HOLLOWAY, LONDON, N.7

Recognised Day courses for the PHARMACEUTICAL and 1st Medical Examinations. Evening courses for the Intermediate B.PHARM. and 1st Medical Examinations. Day and Evening Courses in CHEMISTRY, PHYSICS, MATHEMATICS, BOTANY and ZOOLOGY for Internal and External DEGREE EXAMINATIONS of the University of London. Evening Classes for MATRICULATION subjects. Special Courses in RUBBER TECHNOLOGY.

NEW SESSIONS BEGINS 23rd September, 1946

Prospectus free on application. Tel: NORth 1686

LARGE PROFITS UNRESTRICTED SUPPLIES SIMPLE MANUFACTURE

● Make your own brilliant white Haircream with the addition of hot water only to Emulsifier HCP. Costs less than 1½d. per oz. Bottles — Labels — Jars — Perfumes — Dyes all available from stocks.

Send stamp for complete price list, formulæ, and SPECIAL OFFER.

BRICAS LIMITED

FORTRESS GROVE, KENTISH TOWN
LONDON, N.W.5. GULLIVER 3474



PHOSFERINE

TABLETS and LIQUID

● PHOSFERINE is a popular Tonic Medicine which has won world-wide reputation—its popularity being largely due to personal recommendation by those who have benefited by its use.

Phosferine Advertising which makes no extravagant claims consistently keeps our product before the notice of the Public.

Make sure your stocks are equal to the demand

**PHOSFERINE (Liquid and Tablets)
available in 2 sizes**

**No. 1 retails at 1/4 including Purchase Tax
No. 2 , , , 3/3 , , , , , ,**

PHOSFERINE (Ashton & Parsons) Ltd., St. Helens, Lancs.

DIUROMIL

An explanation

Many chemists are wondering what we are doing about their orders for DIUROMIL. We regret the delay but these orders are not forgotten.

Our output is up and we hope to do better still soon, but the demand keeps ahead of us.

Orders are dealt with in rotation as fast as supplies allow, so please be patient and don't tell your customers it isn't made now.

*We still can and
do fill orders for*

RALGEX

B R A N D
A N A L G E S I C
By return

PATA

PHARMAX LIMITED
IBEX HOUSE, MINORIES, LONDON, E.C.3

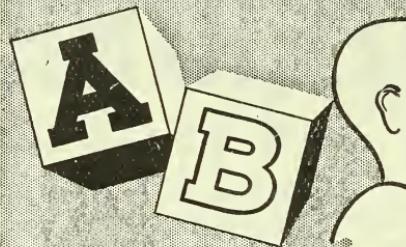
**Increase
IN THE RETAIL SELLING
price of
'NOSTROLINE
Nasal Remedy**

On and after August 1st 1946 the retail selling price of "NOSTROLINE" is increased to 1/9d. including tax.

Increase has been forced upon us by substantially increased cost of production and sale.

The new terms are 14/- (plus 2/4d. purchase tax) per dozen for minimum carriage paid parcels of 4 dozen.

**Matthews Laboratories Ltd., Clifton, Bristol, 8.
CHEMISTS' FRIENDS**
The above prices do not apply in Eire.



HIGHGLEE

TEETHING RINGS & BEADS

Absolutely Safe and Hygienic

WHOLESALE ENQUIRIES
WELCOME
RETAILERS SHOULD
ADVISE US OF THEIR
USUAL WHOLESALE
SUPPLIERS.

A·B PRODUCTS

Springlodge Works, Manningham Lane, Bradford
Telephone & Telegrams 654819



Here is the larger of the two packs of Daisy Tablets which may become more popular than the neat and trim 3½d. size. You will like the new 1/3 pack. A really good formula (A.P.C. with Piperine)—perhaps the best of all A.P.C. combinations), a first-rate pack—a popular price and generous profit. **UNIVERSALLY ADVERTISED**

Limited supplies of this handsome display carton are still available and will appeal to the Chemist who seeks to establish the 1/3 Price Standard.

Order from your Wholesaler: 1 Display Carton (1 dozen), 1/3. Daisy Tablets at 9/6, plus Tax. (P.A.T.A.)

J. E. ELLIS LTD., HORSFORTH, LEEDS

RAZVITE LTD.

wish to advise the trade that some offers are being made direct to wholesalers and retailers of quantities of Razvite obtained from Army Surplus stores. Some of the cream is from three to four years old and is packed in war emergency containers. The condition of such supplies may be very poor and the trade is warned that they should buy Razvite Brushless Shaving Cream only from their regular wholesaler or from the sole distributors,

CHEMICAL & NATURAL PRODUCTS LTD.

Wimbledon Factory Estate,
Morden Road

S.W.19

IN FAIRNESS TO YOU

Our rationing system, instituted under wartime conditions, has enabled each of our customers to receive his fair share of our products during a period of intense shortage.

Though it meant heavy extra work for us, it nevertheless proved the only means of spreading available supplies fairly through the retail and wholesale trade.

That it will not be continued a moment longer than is absolutely necessary, we can assure you.

The time has not yet been reached however when we can effect any sensible increase in the present quotas, nor are we in a position yet to open new accounts.

THE CHAS. H. PHILLIPS CHEMICAL CO. LTD.
179 ACTON VALE, LONDON, W.3

'MILK OF MAGNESIA' · PHILLIPS' DENTAL MAGNESIA · PHILLIPS'
BEAUTY CREAMS · 'DANDERINE' · 'CALIFORNIA SYRUP OF FIGS'

P.A.T.A.

TAMPAX
SANITARY PROTECTION
Worn Internally

PERCENTA

Containers of Metal,
Glass, Aluminium
and Plastic.

PERCENTA LTD. (Dept. No. 23),
69-73 Borough High Street,
London, S.E.1.
Tel.: HOP. 1808/3751.

FRANCO-BRITISH ELECTRICAL CO. LTD.
For Ampoules & Vials. FIRTH STREET GLASSWORKS
LEEDS 9



50% PROFIT on COST

... is assured if you display and sell
E.N.T. POWDERS & CAPSULES

Highly recommended for relief from headaches and all nerve pains.
Safe stock, sound formula and very satisfactory profit bringers.

From all Wholesalers or direct from :—

P.A.T.A.

The E.N.T. MANUFACTURING COMPANY LIMITED
433 Gloucester Rd., BRISTOL 7. London address :— BCM/ENTCO W.C.1

MISCELLANEOUS OPPORTUNITIES

Citrates; Salicylates; Bromides; Iodides; Gums; Waxes, "Spermaceti," etc. Essential Oils; Magnesium; Potassium; Sodium; Acids; Salts; Lanoline; Petroleum Jelly; Stearic Acids; Talcs; Mercurials; Synthetic Vitamins.

All Fine and Heavy Chemicals.
Home and Export.

J. J. VIGON & Co. Ltd.
30 Fenchurch Street, London, E.C.3
Mansion House 2034/5

AMBROSIA
Hairpins

2" BRONZE. Retail 6d. per pkt.
63 in pkt.) Price 16 pks. 4/8d.
including P. Tax. Wholesale &
Export Enquiries Invited.

PRE-WAR
WRAPPINGS

Keenedge Ltd.
18, Waltham Avenue,
London, N.W.9.

Notice to
Manufacturers & Wholesalers only
LIPSTICK CONTAINERS (9mm) push-action,
injection moulded in Cellulose Acetate.
We can assure prompt deliveries.—
113/570 C. & D. Office

LIPSTICK CASES—Assorted Colours—Cardboard Push-up, 3/9 per doz.; Plastic Screw-on, 12/- per doz.; Metal Propellor, 15/6 per doz.
(Purchase Tax 100%)

LIPSTICK REFILLS—“TRYST,” Creole, Red Velvet, Passion, Flame, 12/- per doz.
(Purchase Tax 100%)

POWDER COMPACTS—Imitation Leather, with puff, 35/- per doz.; Silk covered, with puff, 35/- per doz.; Imitation leather, with filter, 6/- each; Metal Decorated, with filter, 8/4 each; Metal Plain Colours, with inner lid, 10/- each.
(Purchase Tax 100%)

Send for full Price List

CLEMROW TRADING CO., LTD.
33, Ivor Place, Baker Street, N.W.1

CETYL ALCOHOL, superfine perfume quality available in 56 lb. and 112 lb. lots, Ex Warehouse, London.

GLYCERYL MONOSTEARATE
finest grade for use in cosmetics, pharmaceutical and food products, in 1 cwt. packages.

Both for immediate delivery

Samples on application

CHEMICALS & ESSENTIAL OILS LTD.

95, Aldwych, W.C.2

Phone: Chancery 6116

GAMBoge

Wanted for export orders, any size parcels.

Offers to:—
113/547. C. & D. OFFICE

F. J. GODDARD **PACKING CASE MAKERS**

for Home and Export
Second-hand Cases and Cartons, all sizes

Lowest Prices on application

Telephone: RODney 4181
Factory: 5a Walworth Place, Walworth, London, S.E.17

KLENFEX LABORATORIES LTD.

327, Latimer Rd., London, W.10

OFFER for immediate delivery

D.D.T. 80/84%

**5, 10, 15, 20% Dusting Powders
and 5% Water Miscible Spray Powder**

Large London Distributing House is looking for new lines suitable for Chemists, High Class Ladies Hairdressers and Stores. Sales force covers whole of Great Britain. Will purchase with view to Sole Distribution. Lines will be nationally advertised.

Write giving details to:

British & International Proprietaries, Limited.
30, Budge Row, London, E.C.4

French Laboratory manufacturing analgesic ointments, powders, solutions, drops, wishes to open branch in England.

Enquiries to

STEINER
107, RUE DES DAMES, PARIS 17.

E HARRINGTONS H

BRAND

A S P I R I N S M

EXCEPTIONAL PROFIT
EXCLUSIVE PACK
LONDON OFFICE: 2 BERRIDGE Grn. EDGWARE

EXPORT MARKET

PERFUMES SUITABLE FOR
BAZAAR TRADE, ALSO OINTMENTS,
SHAVING CREAM, ETC.

Details and quotations on application to—

Harman Dietetic Laboratories
LIMITED

109, CRICKLEWOOD BROADWAY, N.W.3



The CHEMIST AND DRUGGIST

SUPPLEMENT

This Supplement is inserted in every copy of the Chemist & Druggist

28 ESSEX STREET, LONDON, W.C. 2

AUGUST 17,
1946

prevailing restrictions and heavy demand on space necessitate the holding over of a number of advertisements week by week. As normal press days are in abeyance advertisers are advised to send instructions as early as possible. Advertisements must be prepaid. Box Office Numbers 2/- extra.

Pure White **TIN OXIDE**

(STANNIC)

Pure Powdered

TIN METAL

for medicinal purposes

Manufactured by:—

KEELING & WALKER, LTD.
STOKE-ON-TRENT

Telephone: Stoke-on-Trent 4136/7

**Now is the time to order your
Perfume Compounds, bottles,
etc., for the summer period.**

Limited supplies available.

PATRICK, JAMES & CO.
High Street, Kingston-on-Thames.
Telephone: KINGston 8183.

SITUATIONS OPEN

1/6 for 40 words or less, 2d. for every additional word.

RETAIL (HOME)

SSISTANT Dispenser, unqualified, required for high-class dispensing business. Position would be junior or one requiring additional experience. Please send full particulars, age, experience, salary required, to Messrs. R. A. Sharp (Chemists), Ltd., 2 High Street, Uxbridge, Middx.

SSISTANT, male, unqualified, able dispense, required by chemist, near Clapham Junction. Permanency. Apply, giving details age, experience, salary etc., to 114/619, C. & D. Office.

URHAM COUNTY. Excellent opening is offered to recently qualified Pharmacist (either) as manager in old-established Privately owned Pharmacy. Valuable opportunity for experience in branches of the business. Good salary. Phone: Ryhope 259. Illeys' Ltd., Ryhope, Sunderland, Durham.

DO NOT HOARD

your surplus or redundant stock of perfume and Toilet Bottles—Bakelite and Metal Caps.

TURN IT INTO CASH

Send samples and details to:—

S. KHAN

Norton Folgate, LONDON, E. I
BISHOPSGATE 3738/9

NAIL Files: 27s. gross in three-gross lots. Hair Curlers: 12s. 6d. gross. Japanned 4 in. Hair Wavers: 24s. gross in three-gross lots. 116/665, C. & D. Office.

THE C. & D. POISON'S GUIDE

1944 Edition now available. Up to date, Enlarged, exhaustively Revised. 7/9 Post Free.

THE CHEMIST & DRUGGIST,
28 Essex Street, London, W.C.2

ELDERLY Qualified Assistant wanted for a good class business. State salary required and experience, etc. Williams & Smith, Chemists, Horsham. **E**XPERIENCED qualified assistant immediately. Good class dispensing and N.H.I. Two other assistants. Good salary. Please give full particulars of age, etc. Skitt's Pharmacies, Ltd., 104 High Street, Ramsgate.

GILLINGHAM Co-operative Society have vacancies for Qualified Pharmacists. Excellent prospects for keen men. Superannuation scheme in operation. Living accommodation available if required. Apply stating age, experience, and salary required to Managing Secretary, Gillingham Co-operative Society, Kent.

LADY Assistant, experienced for dispensing and retail counter wanted about middle of September. Part time qualified might suit. Please write stating age, experience and salary required, to Miss Robinson, New Pharmacy, Cookham Rise, Maidenhead, Berks.

LONDON, N.W.10, Neasden. Qualified Manager wanted for branch. Permanency. Edgar Davies, 59 Dudden Hill Lane, Willesden.

MANAGER wanted for small, good class pharmacy in the West End of London. Would suit young man or woman recently qualified wishing to gain experience. Apply 115/641, C. & D. Office.

MANSFIELD-NOTTS. Wanted, early October, a doctor's dispenser bookkeeper (full-time—about 36 hours a week). State salary. References. 110/465, C. & D. Office.

ORDRIDGE & COMPANY Employment Agency, Columbia House, Aldwych, W.C.2. Chancery 6446-7. Branches at Southampton and Birmingham. Enquiries invited from all employers seeking staff. Many pharmacists and unqualified assistants available for retail and wholesale. Representatives also requiring situations. Reasonable terms. Write to Columbia House for particulars.

PHARMACIST required as manager. Permanency. Good salary to suitable applicant able to commence at once. Lionel Kirby, Ltd., 261 Dewsbury Road, Leeds, 11. Phone 75696.

QUALIFIED Assistant required for progressive business. Congenial working conditions and good salary. Apply Marsons, Ltd., 123 Baker Street, W.1.

QUALIFIED Chemist, male or female, required to take charge of chemist shop (London). Good salary and commission to right applicant. Full particulars of experience, etc., to 115/643, C. & D. Office.

QUALIFIED lady required for dispensing business. Pleasant position. No Sunday or holiday duty. Part time if preferred. Apply: Timmis & Kirk, 183 High Street, Beckenham.

TWO Hall-trained dispenser-book-keepers required for partnership of three doctors; good salaries; residential country district 40 miles London. Apply: Dr. Barnes, Woburn, nr. Bletchley.

THE Royal Arsenal Co-operative Chemists have vacancies for qualified and unqualified pharmacists, in their branches throughout south-east and south-west London. Good conditions of service and holidays with pay. Trade union rate of wages. Apply in writing stating age, experience and salary required, to the Staff Manager, Royal Arsenal Co-operative Chemists, 113 Powis Street, Woolwich, S.E.18.

TWO qualified ladies or gentlemen required at once—one for management of branch shop, S.E. London. Good salary and excellent prospects especially for the right kind of person requiring a secure future. Reliable references required. Advertiser does not mind waiting if immediate acceptance is not possible. 113/582, C. & D. Office.

TWO Qualified Managers required for reopening West End pharmacies. Comfortable posts. Hours 9 a.m.-6 p.m. Half day off, no Sunday duty. Write 112/517, C. & D. Office.

UNQUALIFIED assistants (male) required. West End. High class trade. No Sunday duties. Write 112/518, C. & D. Office.

UNQUALIFIED lady dispenser required for good-class pharmacy. Send usual particulars to Mrs. D. McCarthy, 88 Station Road, Sidcup, Kent.

WANTED. Chemist-Optician. Mostly optical and dispensing duties. Good salary. 115/649, C. & D. Office.

WANTED, Pharmacist (male or female). No Sunday or half-day duties. Written applications, stating age, experience, etc., to General Manager, Sowerby Bridge Industrial Society, Ltd., 60 West Street, Sowerby Bridge.

RETAIL (OVERSEAS)

WANTED for Southern Rhodesia, young single male M.P.S., preferably one just qualified. Three years' agreement. Commencing salary £45, rising to £50 monthly. Passage out paid. Apply by letter, stating age and giving full particulars, to Davis and Soper, Ltd., 54 St. Mary Axe, London, E.C.3.

WHOLESALE

AFIRM of international repute manufacturing ethical pharmaceutical products require a pharmacist with some medical knowledge and experience in sales organisation, particularly medical propaganda, development and marketing of modern therapeutic agents. The appointment offers a permanent and progressive position for a qualified man with initiative and drive. Write, giving full particulars regarding age, qualifications, experience, etc., with strictest confidence, to 115/628, C. & D. Office.

AN experienced representative with a live connection among retail chemists and department stores in the Greater London area required immediately to represent a company with two well established popular lines enjoying excellent sales. On first-class experienced travellers calling regularly upon the majority of retailers in the area need apply. Generous commission paid. Write, stating age, previous experience, lines carried at present (confidence), and exact territory covered. A similar representative required for Sussex, Surrey and Kent (S.E. area). Application will be treated in strict confidence. 115/648, C. & D. Office.

APPlicants are invited by an ethical firm manufacturing chemists for the position Representative (not necessarily qualified) to call upon doctors, chemists and hospitals in Northern Ireland and the counties of Dublin and Louth. Applicants should embody full details of career to date and age, to 115/637, C. & D. Office.

APPICATIONS are invited from pharmacists for appointment to the representative staff of a well-known company conducting technical propaganda in the medical and allied professions. Good salary offered to suitable candidates who should give full details of age, experience and residence in first letter. Write 115/629, C. & D. Office.

CHEMICAL process worker required by manufacturers in North-West London. Apply 115/627, C. & D. Office.

CHIMIST. Young Pharmacist or M.P.S. required to assist works chemist in manufacturing and compounding of various food products. Previous factory experience not essential. Excellent prospects. Old established company, London district. Write fully, stating age, experience, when free, an salary required. Address application to 115/632, C. & D. Office.

EXCELLENT opportunity for ambitious business man, as Assistant to Managing Director of well-known progressive firm, manufacturing high class cosmetics and pharmaceutical products. Salary £1,500 and commission. Permanent job. Golden opportunity for right man. Must have previous experience in similar business, and be good administrator and organiser. Highest credentials essential. Only applicants having all the above qualification need apply. 115/624, C. & D. Office.

EXPORT Clerk required to assist Manager of North London manufacturing chemists proprietary toilet articles. Applicants must be experienced in invoicing and familiar with export regulations, accurate at figures, with shipping experience. Excellent prospects for conscientious, hard worker. Experience in the preparation of returns and statistics an advantage. Applications, stating age, if married, particulars of experience, salary required, to Box No. 985, L.P.E., 110 St. Martins' Lane, W.C.2.

EXPORTERS require assistant to Chemical Department Manager. Must have experience. Good prospects to energetic man. Reply 116/661, C. & D. Office.

GEORGE BELL'S Pet Remedies. A few vacancies are available for Representatives of high integrity, ability and smart appearance. Apply Bell & Sons, Ltd., Veterinary Chemists, Silverdale Works, Liverpool, 13.

IVE Representative with existing connection among stores, chemists and hairdressers in central London, required by distributors of nationally advertised hair preparations and toilet requisites to be sold in conjunction with fast-selling sundries. Prospects excellent for a man with initiative who is a "go-getter." 116/657, C. & D. Office.

ALE or female Cost and Invoice Clerk required. Must be fully conversant with Surgical Sundries. Write stating experience and salary required to The Medical Supply Association, Ltd., 167 Grays Road, W.C.1.

AMANUFACTURING Chemists require representatives to call upon the retail and wholesale trade in the following territories: A, Glasgow and South-West Scotland; B, Sussex, Surrey, Kent and Kent; C, South Wales; D, Berks, Oxford and Bucks. Liberal commission and expenses. Replies in confidence to 116/656, C. & D. Office.

AMANUFACTURING Chemists with progressive policy marketing exceptionally attractive and saleable products invite applications for sale agencies in the following territories: — 1, Eastern Counties; Bucks, Berks, Beds, Herts, Oxford and Northants; Northern Ireland. Applicants must possess card well introduced to the retail and wholesale chemists, co-ops and stores on the defined areas. Essential characteristics are initiative, energy and activity. Initial remuneration by commission with vision after probationary period. Our salesmen earning consistently large incomes. State age, experience and present lines carried. All applications acknowledged. 115/634, C. & D. Office.

HARMACIST required as representative by Manchester firm of wholesale chemists; recently qualified, willing to be trained, would suit; must be able to drive a car. State usual particulars. 115/636, C. & D. Office.

HARMACIST, youth preferred, chiefly for tablet and pill manufacturing department. Previous experience desirable, but not essential. Must be keen and energetic. N.W. area. 115/653, C. & D. Office.

PROGRESSIVE FIRM OF IMPORTERS & WHOLESALERS dealing in all raw materials for the perfume trade require energetic representative with sound experience and good connections. Salary and commission, excellent future for right man. Write, giving details of experience and salary to Box 417, c/o Pool's, Aldwych House, London, W.C.2.

EPRESENTATIVE required. Established connection. Calling on doctors and hospitals and chemists, for sale of surgical instruments and hospital furniture, dressings, etc., for counties of Lancashire, Yorkshire, Cheshire and Shropshire. Salary, commission, expenses. Experience essential. Write, 115/631, C. & D. Office.

EPRESENTATIVE required by distributors of well-known toilet preparations, with connections amongst chemists, hairdressers and stores, for Cornwall, Devon, Somerset and Dorset. Excellent prospects for man with initiative. 116/659, C. & D. Office.

EPRESENTATIVE required to carry additional lines calling on chemists, pet shops and allied trades. Old established products, good commission and every sales assistance given. Details lines carried, territory covered and frequency of calls, to 115/639, C. & D. Office.

EQUIRED for our laboratories—junior chemist, preferably female. Good wages and canteen facilities. Apply by letter, giving full particulars to Clayton Brothers, East Hill, Wandsworth, S.W.18.

EVERAL young boys required for training and work in the manufacture of organic chemicals. Applicants should possess Higher Schools Certificate or have reached Inter-B.Sc. standard. Apply 115/627, C. & D. Office.

SALES Manager required for medium sized organisation specialising in the manufacture of high grade proprietary packed goods selling throughout the country to wholesale and retail chemists, grocers, ironmongers, etc. Applications are invited from sales managers experienced in building up and controlling live sales organisation who can produce evidence of successful working in this field. No application will be considered unless accompanied by a schedule stating age, appointments held, responsibilities and remuneration. A commencing salary of £1,000 p.a. is envisaged plus commission on sales. Write fully in confidence to 115/651, C. & D. Office.

SENIOR Assistant, lady, Ph.C. or B. Pharm., required for analytical laboratory. Previous experience of analysis of drugs and galenicals desirable but not essential. Apply with full details by letter to Stafford Allen & Sons, Ltd., Wharf Road, London, N.1.

STOCK Keeper or Order Clerk required for Surgical Sundry Dept. Only fully experienced need apply, male or female. Permanent position assured. Write giving full particulars and salary required to The Medical Supply Assn., Ltd., 167/173 Grays Inn Road, W.C.1.

TABLET Maker required by manufacturing chemists, South Wales; 5-day week. Applicants must have had first-class experience in all tablet manufacture, also sugar and chocolate-coating, and thoroughly understand rotary machines and their maintenance. Details of salary, etc., to 115/646, C. & D. Office.

TABLET Maker required by a London firm of Manufacturing Chemists. Applicants must have had experience of all kinds of Tablet making and Sugar coating and must understand Rotary machines. 5-day week. Apply in the first instance to Box 110/466, C. & D. Office.

TABLET Maker required by manufacturing chemists. Permanent position for suitable applicant. Write or call Matthews & Wilson, Ltd., 6-8 Cole Street, London, S.E.1. HOP 2147.

THREE is a vacancy in our organisation for a pharmacist to take charge of the medical department. It will be filled by a man who can control and effectively lead a team of propaganda representatives working amongst the medical, dental and nursing professions, and who can assume responsibility for exhibition arrangements. Ability to write technical copy is not essential. Application should be made by letter giving complete information regarding qualifications, experience, references and salary required to: The Secretary, Macleans, Ltd., Great West Road, Brentford, Middlesex.

WANTED, competent young laboratory manager by manufacturers of cosmetic and pharmaceutical products. Someone with real experience of emulsions given preference. Good salary and prospects. Write Box 228, Smiths', 100 Fleet Street, E.C.4.

WELL introduced Sales Representative required for high-grade luxury toilet preparations (nationally advertised), to be carried as additional line on commission basis; to call on chemists, hairdressers and departmental stores for various provincial areas. Give references in first letter and name present lines carried. 114/612, C. & D. Office.

WELL-KNOWN firm of Distributors of nationally advertised Hair Preparations and wholesalers of first-class Fancy and Sundry Lines require a keen, energetic young man with connections amongst chemists, hairdressers and stores as representative for Essex, Suffolk and Cambridge. 116/658, C. & D. Office.

WORCESTER, Hereford and Shropshire. Representative required for area now vacant by distributors of nationally advertised toilet requisites and wholesalers of chemists' and hairdressers' sundries. Commission basis. 116/650, C. & D. Office.

WORKS Manager required for chemical factory making cosmetics, pharmaceutical preparations and polishes at Brentwood, Essex. Salary £750 per year. Send details, age, experience in staff control, construction, maintenance of buildings and machines, stock control, receiving and despatch, buying, etc., 116/655, C. & D. Office.

YOUNG and energetic Tablet Maker required by rapidly expanding West Yorkshire firm. Applicants must be conversant with rotary machines with view to taking control of the department in near future. The position holds an excellent opportunity for the right man. 115/620, C. & D. Office.

YOUNG qualified assistant required for small manufacturing pharmaceutical laboratory. Birmingham district. Apply, stating age and salary required to 115/638, C. & D. Office.

£750 per annum and commission on output offered to chemist with first-class experience in the preparation and production of highest grade perfumes and cosmetics. Progressive position with established firm at Brentwood, Essex. Most modern equipment on order or on hand. Adequate supplies of materials and containers. Send all details of experience, age, etc. 114/615, C. & D. Office.

CLERICAL

EXPERIENCED Shorthand-Typist required for publishing department of The Chemist and Druggist. Hours 9.30 a.m. to 5 p.m. At present the office is closed on Saturdays. Apply the Staff Director, Morgan Brothers (Publishers), Ltd., 28 Essex Street, Strand, London, W.C.2.

WHOLESALE (OVERSEAS)

EXPERT in the preparation of Titanium Dioxide Pigment from Ilmenite required by the Government of Ceylon. Candidates must be fully acquainted with processes of manufacture in all stages based on experience. Attractive remuneration for the right man. Applications, stating age, full particulars and experience and salary required, should be sent to the Crown Agents for the Colonies, 4 Millbank, London, S.W.1, quoting M/N/16887.

REPRESENTATIVE for India and Ceylon required by well-known manufacturers of pharmaceuticals. Local knowledge essential. Single man preferred. Six to twelve months home service before overseas appointment. Particulars to Box No. 866, Spottiswoodes, Regent House, Kingsway, London, W.C.2.

WANTED FOR INDIA. Pharmaceutical Chemist experienced in manufacture of alkaloids and galenicals, and capable of research with a view to improving manufacturing process. Good prospects, factory up-country. Remuneration £500, all travelling and living expenses paid. 115/630, C. & D. Office.

SITUATIONS WANTED

2/6 for 18 words or less, 1d. for every additional word.

RETAIL (HOME)

ELDERLY, unqualified, light post. All round experience. Manage drug store, etc. Little, 44a, The Grove, Isleworth, Middlesex.

EXPERIENCED Pharmacist (50) seeks responsible position, Yorkshire preferred; available Sept. 16; succession entertained. State particulars, including salary: 116/663, C. & D. Office.

UNQUALIFIED, Experienced Locum, general assistant, would give useful help daily 1 to 6, Saturdays 10 to 6, City and West End stores and heavy Insurance dispenser. Gibson, 31, Stansfield Road, Stockwell, S.W.9.

RETAIL (OVERSEAS)

CHEMIST and Optician, aged 31, married, present Army officer, desires position Rhodesia or South Africa, wholesale or retail. M consider interest in business. 116/662, C. & D. Office.

WHOLESALE

A YOUNG Man of 36 years, with experience the manufacturing chemical industry, printing and allied trades, desires a change. Experience follows: Fourteen years' manufacture of pharmaceutical and fine chemicals, control of "dry floor and part-time representative; five years' assistant manager controlling stock and dispatch of printing and photographic chemicals, sundries and manufacture of photo-litho proprietaries. Write, 115/62 C. & D. Office.

ACTIVE Representative desires change with reputable house Southern or Eastern Counties. Fifteen years' experience with chemists' sundries and toilet preparations. 115/652, C. & D. Office.

EIRE. Well-known Representative (L.P.S.)

hons.), after eight years with prominent British house calling on chemists in Eire, seeks change. Would represent British or Irish house or would consider first-class sole agencies. Age 33. Own car Capable and energetic. Box 110/472, C. & D. Office.

PHARMACIST seeks position as representative

reputable firm, on salary, commission and expenses basis. Extensive experience in the presentation

of pharmaceutical specialities, drugs and chemicals to hospitals, doctors and the trade generally. Reply in confidence to 115/644, C. & D. Office.

REPRESENTATIVE, established connection retail

chemists, London area, requires additional lines, packed goods, sundries, etc., on commission

116/664, C. & D. Office.

REPRESENTATIVE desires post with firm

repute with connection Midlands, Cheshire, North Wales, N.E. Coast. Experience in selling

packed goods, toilet sundries, proprietary lines. Excellent sales record, over twenty years' experience

calling on chemists. 115/623, C. & D. Office.

REPRESENTATIVE (33 years), representing be

known Liverpool manufacturing chemist house

seeks additional lines (surgical dressings preferred)

covering Lancashire, Cheshire. Salary or commission

115/642, C. & D. Office.

WELL-INTRODUCED Representative (2)

desires career with house of repute. Know to some 4,000 pharmacists, doctors, dentists throughout South-Eastern and Eastern Counties. Experienced propaganda detailing (trade and professional)

Highest references. Car driver. Willing to travel

113/546, C. & D. Office.

APPOINTMENTS

HERTFORDSHIRE COUNTY COUNCIL SHRODDELLS HOSPITAL, WATFORD

ASSISTANT PHARMACIST, M.P.S., required at Shroddells Hospital, Watford. Salary and conditions of service in accordance with the Scale of the Joint Negotiating Committee (Hospital staffs), i.e., £320 p.a. x £15 to £380 and £20 to £400 maximum. Forms of application may be obtained from the Chief Administrative Officer.

LOCUM Pharmacist, supervision and light administrative part-time duties for one month commencing late August or early September. Also Locum Assistant (Apothecaries Hall Diploma) for fortnight commencing September 16. J.N.C. Scale salaries (pro rata for part-time work) paid. Apply to Secretary, West Kent General Hospital, Maidstone.

CITY OF NOTTINGHAM
HEALTH AND SOCIAL WELFARE
COMMITTEES
DISPENSER

Applications are invited for the appointment of Assistant Female Dispenser (Apothecaries' Hall Qualification) for duties at the City Hospital and Out-Relief Dispensaries as required. Salary in accordance with the Joint Negotiating Committee's scale, i.e., £220 rising by annual increments of £10 to £270, followed by long service increments of £10 per annum every four years to a maximum of £300. The salary is inclusive of war bonus.

The appointment will be subject to the provisions of the Local Government Superannuation Act 1937, and the successful candidate will be required to pass a medical examination, and to reside within the boundaries of the City.

Applications to be made to the Chief Pharmacist, City Hospital, Hucknall Road, Nottingham.

J. E. RICHARDS.
Town Clerk.

The Guildhall,
Nottingham.

9th August, 1946.

**RAMPTON STATE MENTAL
INSTITUTION, NR. RETFORD, NOTTS.**

WANTED. PHARMACIST (Female). Scale of salary:— £250 x £15 x £325 per annum basic, plus consolidation addition, making it £313 at the minimum and £397 at the maximum, plus quarters (consisting of a bedroom and sitting room) valued at £40 per annum for superannuation purposes. Food is provided at cost price (at present 14s. per week). Subject to the issue of a certificate of qualification by the Civil Service Commissioners the post would be pensionable under the Civil Service Superannuation Acts. Further particulars will be provided on request. Amenities such as tennis courts, badminton and a swimming pool, etc., are available free of charge. Applications, stating age, experience and references, etc., should be sent to the Medical Superintendent.

**RUNWELL HOSPITAL, NEAR
WICKFORD, ESSEX**

SENIOR ASSISTANT PHARMACIST required at the above mental hospital. Salary £365 per annum rising by five annual increments of £15 to a maximum of £440 per annum, less £20 per annum if emoluments of lunch and tea are taken. Temporary accommodation in the hospital would be available for a single person if required. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909, and to the Committee's Sick Pay regulations. Applications, stating age, experience and qualifications, with copies of three recent testimonials, to the Physician Superintendent, as soon as possible.

SURREY COUNTY COUNCIL

ASSISTANT PHARMACISTS at:— KINGSTON COUNTY HOSPITAL, Wolverton Avenue, Kingston-on-Thames, BOTLEY'S PARK HOSPITAL, Chertsey. Must possess Ph.C. or Chemist and Druggist qualification, salary on grade £320 by annual increments of £15-£400 p.a. inclusive. Apply to Medical Superintendent of appropriate Hospital.

THE UNIVERSITY OF MANCHESTER

Applications are invited for the post of Demonstrator in Pharmacy (two to be appointed). Duties to commence September 29, 1946. The post will be Full-Time but there will be opportunities for research. Candidates should possess a University degree in Pharmacy and/or the Ph.C. diploma. Salary £300 per annum. Application not later than August 31 to the Registrar, the University, Manchester, 13.

BUSINESS OPPORTUNITIES

12/6 for 36 words or less, 3d. for every additional word

PACKING Orders from bulk materials required by London packing company. First class work at attractive prices. Special quotations for regular deliveries. Ample storage accommodation. 115/640, C. & D. Office.

SACCHARIN Tablets or any other kind of tablets packed, quick service, no order too small. Write for details of this service to Three Crowns Tablet Co., 21-25 Derringham Street, Hull.

SOUTH WALES firm of Tablet Manufacturers with excellent facilities are now able to manufacture, and pack if desired, any size of tablet. Customer's materials and excipients preferred. Contracts can be arranged if desired. All products are under strict analytical supervision. Write 115/647, C. & D. Office.

TABLET Manufacturers are now able to undertake orders for tablets to own formula, coated or plain. Fullest details to 115/650, C. & D. Office.

BUSINESSES WANTED

7/6 for 40 words or less, 2d. for every additional word.

HILLIER, PARKER, MAY & BOWDEN, Surveyors and Valuers, 77 Grosvenor Street, W.1, have applications for several sound and progressive single-shop Businesses occupying premier trading positions in London and Provinces, or a Group Concern would be seriously considered. Others contemplating sale or their solicitors are invited to write for further information to Hillier, Parker, May & Bowden, 77 Grosvenor Street, W.1.

MANUFACTURING Chemist wishes to purchase in Manchester area manufacturing and/or wholesale concern in drugs, patent medicines, etc. Would consider alternatively any allied business. Capital approx. £10,000. Must stand thorough investigations. All communications in strictest confidence under 114/614, C. & D. Office.

BUSINESSES FOR DISPOSAL

7/6 for 40 words or less, 2d. for every additional word

DRUGGIST on Sussex coast, in unique position for fully qualified chemist—no opposition—comprising double-fronted shop, fittings, stock approx. £700. With immediate vacant possession of modern house, garden and garage. House fully furnished in every detail with modern furniture six years' old, including linen, plate glass, cutlery, household utensils, carpets, etc., etc. 14 years' lease to run. Would consider selling without furniture. Write in first instance to 114/617, C. & D. Office, stating what offer prepared to make in either case.

DRUG STORES with £500 manufacturing permit. South London main road. House and garden attached. Long lease, controlled rental £45 per annum. Present profits £520 per annum (auditors' certificate). Excellent scope for development. Price, £1,350 including stock (approx. £200 at cost), fixtures, and fittings. Vacant possession. No offers or dealers. Write 115/626, C. & D. Office.

HIGH-CLASS Cosmetic and Drug store in very busy main road in North-West London. Established 10 years. Excellent prospects for adding pharmacy. Any trial given. Particulars at interview in confidence. Capital required, £4,500. 115/645, C. & D. Office.

GENUINE business with Kodak agency offered for sale in industrial village in Northamptonshire. No opposition. Was established pharmacy over forty years, until 1943. Run as drug store since that date. Easily convertible. Freehold premises, with good living accommodation and storage. Auditors figures available. Annual turnover app. £3,500. Stock about £600-£700. Price for fixtures, fittings, premises, goodwill and stock, £4,000. 114/602, C. & D. Office.

LONDON, S.W.17. Small manufacturing concern for sale. Mouth wash, tooth paste and tooth powder. 114/618, C. & D. Office.

AGENCIES

12/6 for 36 words or less, 3d. for every additional word.

PHARMACEUTICAL Specialities. Household medicinal products, toilet sundries, etc. Large Canadian sales agency wishes to represent English manufacturers. Coast-to-coast sales coverage of retail/wholesale drug trade. Write Laurentian Agencies, 429 St. Jean Baptist Street, Montreal, P.Q., Canada.

WHOLESALE distribution is required in certain areas for several high-grade pharmaceutical preparations. Distribution of these is preferred through chemists, although some are of keen interest to hairdressers. First-class wholesalers at Manchester, Birmingham, Cardiff and Dublin are specially invited to request samples. Please write. 114/611, C. & D. Office.

WANTED

7/6 for 36 words or less, 2d for every additional word.

A GOOD price offered for Cameras, Enlargers and all Photographic Apparatus, Exposure Meters, Tripods, good Binoculars, Microscopes, Cine-Cameras and Projectors, prompt cash. Wallace Heaton, Ltd., 127 New Bond Street, London, W.1.

AUTOMATIC Cream Filler wanted at once; big price paid. Shavex Co., Bavaria Road, Holloway, N.19.

BOTTLES Wanted. 100 gross (or part) 3 oz. medical flats for corks or screw caps. C. & M. Medical Products, Ltd., 558 Bath Road, Bristol, 4. **BOTTLES**, No. 3 Tablet Size, screw caps, urgently required, up to 200 gross wanted. Samples and prices to: Three Crowns Tablet Company, 21-25 Derringham Street, Hull.

EDIBLE Sheet and Powdered Gelatin required in large quantities. 965/970, C. & D. Office.

HIGH prices paid for finest quality perfume bottles, sizes 1 dram to 10 ozs. Send particulars quantities, price, size, etc. 114/616, C. & D. Office.

MANUFACTURERS require, for own use, regular quantities (large or small) of Lactose R.P. or Edible and Citric Acid. 106/328, C. & D. Office.

STEARIC Acid Triple Pressed required in large quantities. 965/969, C. & D. Office.

TABLET Bottles, large or small quantities, Nos. 3 and 7. With or without screw caps. 100 to 200 gross needed urgently. Sample and price to: H. O. Lloyd, 10 Suffolk Parade, Cheltenham Spa, Glos. 'Phone 4949.

TOILET Bottles, 1, 2 and 4 oz. D. Devon, 30 Norfolk Place, London, W.2. Pad. 2714.

WANTED. Saccharin 550 powder or tablets, any quantity, also aspirin powder, aspirin tablets, phenacetin powder, extract of malt and glycerin. All purchases cash with order. Excess stocks also bought. 114/601, C. & D. Office.

WANTED. 5 gall. tins, new or used, in good condition, 1 oz. tons with presslid. J. R. Bloom, Ltd., 35 Warrington Crescent, London, W.9.

WANTED, 100 gross a month, preferably 1 oz or 2 oz. screw-neck ribbed ovals. Other types considered. Send sample and state quantity, please to Bureau of Insemination, Ltd., Carlton Road, Burnley, Lancs.

WANTED, 550 Saccharin Powder, also bulk supplies Standard Saccharin Tablets. Large or small quantities taken. Replies to W. Pearson, 143 Endike Lane, Hull. Tel. No. 10986.

8 OZ. Plain Medicals, 8-oz. ribbed Ovals, 2 2½ oz. Panels; divisioned Cartons to hold any of these. Samples and prices to S. Tatlow & Co., Ltd., Eckington, Sheffield.

26 OZ. and 13-oz. Wine or Champagne Bottles required. 625/524, C. & D. Office.

EXPORT TRADE

MANUFACTURERS of pharmaceutical products interested in developing Indian market please contact leading firm with branches all over India. Rep. now in London. 113/580, C. & D. Office.

MISCELLANEOUS SALES

12/6 for 36 words or less, 3d. for every additional word.

A N opportunity for chemist just starting or re-opening business. About 400 chemists' round and other bottles, many containing chemicals an all with labels. Glass dispensing screen with glass top and shelves under with sliding window. The lot £28. Seen S.W. London. Green, 19 Wandsworth Road, S.W.17.

FOR SALE, number of flat-top Trolleys, 2 ft. 11 in. long x 14 in. high, oak tops, four 10 in. dia rubber-tyred wheels. £4 4s. each delivered. Ree Brothers (Engineering), Ltd., Cuba Street, Millwall, London, E.14.

FOR SALE. Plate Type Heat Exchanger, b. Aluminium Plant & Vessel Co., 32 brass plate about 21 in. x 18 in. with stainless steel division plates, brass fitted, 6 N. & Z. electrical thermometer and 2 pressure gauges; ratchet action hand closing Reed Brothers (Engineering), Ltd., Bevis Marks House, London, E.C.3. 'Phone AVENUE 1901/4.

GLYCERYL Monostearate, 5 cwt., 20 grs. Nail varnish bottles. Water sol. perfume compounds, 2 cwt. boric ac., synthetic henna, 1 dz. pyramid bottles with wood toped corks, 10 grs all surplus stocks. Offers to: J. R. Bloom, Ltd., 35, Warrington Crescent, London, W.9.

PEPPERMINT Oil, Rectified Brazilian, 56 lb. immediate delivery; reasonable offer, whole or part. 116/654, C. & D. Office.

TABLET compressing machines, single punch 1 4 small ½ in. diameter max., 4 large ¾ in. diameter max. All in good condition. Three Crown Tablet Company, 21-25 Derringham Street, Hull.

1 TORRANCE Gyrotar Cone Mill for sale. In good condition. Capacity 100 lbs. Fast and loose pulleys. For ointments, creams or paint. Seen London. £75. 115/633, C. & D. Office.

PARTNERSHIPS

QUALIFIED experienced chemist requires active partnership in wholesale, manufacturing, packing or similar business investment. £2,000 to £3,000. 115/635, C. & D. Office.

TRADE MARKS

THE Trade Mark Aero-ped, registered under No. 639188 in respect of pharmaceutical preparations for the feet, was assigned on the 19th July 1946, by Colloidal Chemists, Limited, also trading as Aero-ped Foot Products, of 35 Bessborough Place, London, S.W.1, to Aero-Ped Limited, of the same address, without the goodwill of the business in which it was then in use.

BRITISH ALKALOIDS AND FINE CHEMICALS



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ATROPINE	CAMPHOR	CAFFEINE
EMETINE	QUININE	SALICIN
STRYCHNINE	NICOTINE	NICOTINIC ACID
MERCURIALS	VERMILION	PRUNELLA
ESSENTIAL OILS	CLOVE OIL	
SANDALWOOD OIL		
EXTRACT OF IPECAC. LIQ.		
DRUG GRINDING		

THEOPHYLLINE

*World conditions may determine availability
of supplies*

WHIFFEN & SONS, LTD.

INCORPORATING GEORGE ATKINSON & COMPANY.

ESTABLISHED 1654

FULHAM, LONDON, S.W.6.

'Phone: Renown 3416

'Grams: Whiffen, London

If You're out of One Recommend the Other

In these days, when, do what we will, we cannot always cope with demand, there is an added advantage in the two kinds of Parmint and their three sizes.

All our press advertising features both Parmints and mentions all their prices.

At the moment the 1/5 ready for use Parmint Syrup is in short supply. If you are temporarily out of stock, recommend your customers to take a 2/10 bottle or a 3/1½ bottle of the Parmint Concentrated Essences.

Both are both

P.A.T.A.

and



PARMINT

Concentrated Essences

and

PARMINT

SYRUP

**INTERNATIONAL LABORATORIES
LIMITED**

I-3 SMEDLEY ST., LONDON, S.W.8